

## EXHIBIT A

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July 25, 2006

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has some [14] level of resistance, everything has some level [15] of conductivity, except for superconductors [16] which have no resistance.

[17] Q: And does CPT utilize [18] superconductors in the diodes?

[19] A: No. No one was figured out how to [20] get superconductors into the displays, [21] unfortunately; maybe some day.

[22] Q: So just to illustrate that point [23] that the resistance is found in every substance, [24] can we just — can you just describe for us say

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[1] in the gate line, what is the resistance of the [2] gate lines that we have been talking about?

[3] A: The resistance of a typical gate [4] line is in the kilohm range. Obviously it [5] depends on the size of the display and the [6] design and width of the lines, et cetera, the [7] thickness, but you know, my experience typically [8] they operate around a 10,000 ohm level for [9] reasons that we don't need to get into.

[10] Q: So the gate lines themselves would [11] have a 10,000 ohm level. How does that relate [12] to the .1 ohm resistance that you described in [13] the ITO jumpers?

[14] A: Well, that's obviously much [15] higher, 10,000 compared to a 10th of an ohm is a [16] pretty slight resistance, a thousand compared to [17] a tenth of an ohm.

[18] Q: The way in which the ITO jumpers [19] are used in CPT products where you have 10,000, [20] for example, of those in one outer guard ring, [21] what is the effect of that on current flow in [22] the event of electrostatic discharge?

[23] A: Well, it would have essentially no [24] effect. It would be a negligible affect in

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[1] comparison to these other resistors that are [2] present.

[3] Q: Could we see slide 111, please. [4] When people use ITO in the LCD [5] industry in the manner in which CPT has used [6] that, how does that comport with resistance as [7] defined by the Court?

[8] A: Well, I don't know of any case in [9] the LCD industry where ITO is used to minimize [10] the current from electrostatic discharge. ITO [11] is generally used to provide as much conductance [12] as possible.

[13] Q: I would like to see slide 120, [14] please.

[15] So based on the discussion that [16] we've just had, is it your opinion — strike

[17] that.

[18] Do any of CPT's products contain [19] the resistance of step four of Claim 1?

[20] A: No, they don't.

[21] Q: And could you summarize for us the [22] reasons why you say that?

[23] A: Well, first of all, in terms of [24] this part four here, they don't have the three

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[1] distinct structures. The diodes don't [2] constitute a resistance under the Court's [3] definition because they don't have a specified [4] resistance. And both the diode and the ITO [5] actually serve to maximize current from ESD and [6] not minimize it.

[7] Q: And then if we could quickly look [8] at step five, which is removing said guard ring [9] and row and column interconnections prior to [10] completion of the display. In your view, do any [11] of CPT's manufacturing methodologies that [12] produce the accused products here do that step?

[13] A: They do not.

[14] Q: Why not?

[15] A: Because they don't have the [16] interconnections.

[17] Q: So in summary, then, in looking at [18] the totality of Claim 1, slide 121, can you [19] summarize for us why you opine that CPT's [20] products do not infringe Claim 1?

[21] A: Because they don't provide the [22] interconnecting as required by the definition. [23] And in this portion they don't have the [24] interconnection, therefore, they can't do

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[1] everything, but they also don't have a [2] resistance that conforms to the Court's [3] definition. And again, this is not valid [4] because there are no interconnections. So as a [5] result, none of these is met.

[6] Q: Okay. So I want to talk about [7] Claim 8 now. Is Claim 8 a dependent or [8] independent claim?

[9] A: Claim 8 is a dependent claim.

[10] Q: And what does it mean to be a [11] dependent claim?

[12] A: It means that it contains the [13] elements of the claim from which it depends.

[14] Q: Could I please have slide 121 [15] back, please.

[16] And what claim does Claim 8 depend [17] from?

[18] A: Claim 8 depends from Claim 1.

[19] Q: And so does it include all the [20] limitations that we have just gone through for [21] Claim 1?

[22] A: That's the meaning of it, it [23] includes all these limitations and then adds [24] additional ones.

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[1] Q: So what is your opinion with [2] respect to whether any of CPT's products that [3] are accused here infringe Claim 8?

[4] A: Well, if they don't infringe Claim [5] 1, they cannot infringe Claim 8. So that's very [6] simple.

[7] Q: What is your opinion about —

[8] A: So, therefore, they do not [9] infringe Claim 8.

[10] Q: So if I have understood, we have [11] gone through all the reasons why CPT does not [12] infringe Claim 1 or Claim 8, and I want to [13] switch gears here for a minute and ask you, [14] Dr. Howard, were you asked to consider whether [15] noninfringing alternatives exist to the '002 [16] patent?

[17] A: Yes, I was.

[18] Q: And can you tell us what are [19] noninfringing alternatives, what that term [20] means?

[21] A: Well, a noninfringing alternative [22] is a way of making the product that would not [23] infringe the '002 patent.

[24] Q: And are there any non-infringing

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[1] alternatives that you are aware of?

[2] A: Well, I mean, one of them is the [3] CPT structure, which I just said doesn't [4] infringe.

[5] Q: And in addition to that, are there [6] any other non-infringing methods of which you [7] are aware?

[8] A: Yes. I'm aware of other [9] alternatives.

[10] Q: And could you give us an example [11] of one of those?

[12] A: Well, one example is use of what's [13] called chip on glass technology.

[14] Q: And can you explain what that is?

[15] A: Yes. All these displays have to [16] be connected to the outside world eventually. [17] And typically that's done on the edge of the [18] panel with a flexible connector.

[19] And the flexible connector carries [20] on it a silicon chip that provides the voltages [21] to each of the lines to which it's connected in [22] accordance with the — what the computer is [23] sending out as a picture.

[24] And in chip on glass, those chips

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[1] that normally would be on the flex are placed [2] directly onto the glass. And so you have a [3] smaller number of connects that have to be made [4] to the glass

to send in the digital information [5] to the chips.

[6] Q: And why do you say that chip on [7] glass is a non-infringing alternative to the [8] methods of Claims 1 and 8 of the '002 patent?

[9] A: Because it doesn't fit itself well [10] to outer guard ring. And in looking at CPT's [11] products, for instance, that use, chip on glass, [12] they found that they didn't need to have an [13] outer guard ring.

[14] Q: So do the products that CPT makes [15] with the chip on glass methodology include an [16] outer guard ring?

[17] A: No, they do not.

[18] Q: And how many of CPT's products — [19] well, strike that.

[20] Which CPT products currently use [21] the chip on glass technology?

[22] A: Currently the smaller products use [23] it up to nine inch.

[24] Q: And from a technical point of

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[1] view, are you aware of any reason why CPT could [2] not use the chip on glass technology to produce [3] the larger displays it manufactures?

[4] A: I'm not aware of any limitation in [5] that nature.

[6] Q: Okay. I want to move now and talk [7] about your opinion with respect to the validity [8] or invalidity of the '002 patent.

[9] THE COURT: Maybe we should break [10] for lunch. That way you don't get caught in the [11] middle of that. Would that be okay?

[12] MS. CORBIN: That would be great. [13] Thank you.

[14] THE COURT: We're going to recess [15] for lunch. We're going to take a little longer.

[16] I'll ask you to come back at 1:30.

[17] THE CLERK: All rise.

[18] Jury leaving the courtroom at [19] 12:28 p.m.)

[20] THE COURT: All right. Be seated. [21] Can your technician put up a claim [22] construction order?

[23] MS. CORBIN: The actual order? I [24] think so. Do we have the claim construction

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[1] order?

[2] I can do it on the elmo.

[3] THE COURT: Oh, that's fine.

[4] MS. CORBIN: Yes.

[5] THE COURT: That is — what's [6] that?

[7] MS. CORBIN: Sorry. It's just [8] what I

had set down here, so I could get it [9] And I could put it on the screen.

[10] THE COURT: If you could do that, [11] Doctor, could you stay with us for five minutes?

[12] THE WITNESS: Sure.

[13] THE COURT: We're in recess for [14] lunch, so anybody who wants to leave is free to [15] leave and otherwise sit down, please.

[16] MS. CORBIN: Thanks.

[17] THE COURT: Doctor, have you seen [18] the claim construction order?

[19] THE WITNESS: Yes.

[20] THE COURT: Is it on your screen [21] there, too?

[22] THE WITNESS: Yes, it is.

[23] THE COURT: You can look at either [24] one. I just wanted to be sure. I didn't know.

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[1] THE WITNESS: It is. It is.

[2] THE COURT: I don't know if it was [3] shown here. This is my claim interpretation, [4] how I interpreted the terms, claim language of [5] the patent.

[6] And you've had a chance to look at [7] this and digest it?

[8] THE WITNESS: Yes.

[9] THE COURT: Where did I go wrong? [10] Can you go down these terms that I defined and [11] tell me where I made an error, in your view? [12] And don't be reluctant.

[13] THE WITNESS: I am reluctant to try.

[14] THE COURT: Unless, you know, I [15] was right, which I can't imagine. So I have a [16] thick skin.

[17] I'd like to hear your views and [18] where it's wrong or correct.

[19] THE WITNESS: Well, can we scan down?

[20] MS. CORBIN: Scan down? These are [21] the ones on this page. You want to go to?

[22] I don't want to direct him I [23] mean, I know you're not doing that, but —

[24] MS. CORBIN: He asked to see the

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[1] other page.

[2] THE COURT: Is that what he said?

[3] MS. CORBIN: Yeah. I'm sorry.

[4] THE COURT: It's okay. I thought [5] maybe you thought I said that

[6] MS. CORBIN: No.

[7] THE WITNESS: One of the [8] difficulties we run into here is that a circuit [9] component that has a specified resistance is a [10] lot like the definition of a resistor. A [11] resistor is a component

that has a specified [12] resistance

[13] And that's —

[14] THE COURT: That's what I missed, [15] in your view?

[16] THE WITNESS: That is a — that's, I [17] think, the heart of some of our problems here, [18] because you appeared to exclude a resistor, but [19] the definition of resistor in some books is a [20] component with a specified resistance.

[21] THE COURT: Assuming I had been on [22] my game and caught that, what would I have [23] changed, then in my definitions?

[24] THE WITNESS: I think — you would

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[1] have changed that to a resistor, because that's [2] the only suggestion we have in the patent.

[3] THE COURT: But how would I say [4] it? If you'd be good enough to just tell me in [5] a physicist language as opposed to a history and [6] government major's language, how you would say [7] that.

[8] THE WITNESS: Well, this is okay to [9] say it. The problem is, I believe, in the [10] opinion, you excluded the resistor

[11] And that's what I felt was, [12] frankly, inconsistent, Your Honor.

[13] THE COURT: Okay. So it's the [14] inconsistency?

[15] THE WITNESS: Hmm?

[16] THE COURT: It's something that [17] needs to be noted and added.

[18] THE WITNESS: Yeah. I think if the [19] opinion had not said that it excludes a [20] resistor, it wouldn't have caused so much [21] difficulty.

[22] THE COURT: Okay. Anything else?

[23] THE WITNESS: No, I think — I think [24] that covers it. You're putting me in a very

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[1] awkward position.

[2] THE COURT: No. No.

[3] THE WITNESS: I assume I'm still [4] under oath.

[5] THE COURT: Well, I'm not, so... [6] I just have some responsibilities.

[7] No, it's helpful, because I've [8] been listening to your testimony very carefully. [9] And I wanted to understand the — I thought [10] there was one simple crux of the problem, and [11] that's what you've hit on.

[12] And I understood that through your [13] testimony, I think. And the — I wanted to be [14] sure that I was understanding you correctly.

[15] THE WITNESS: From my background, the [16] only way to interpret what you said is it comes [17] down to

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being a resistor.

[18] THE COURT: Okay. Because I asked [19] the doctor some questions, and this is not for [20] the jury, but does anybody want to ask [21] questions?

[22] MS. CORBIN: Yes, I would like to, [23] please.

[24] THE COURT: Sure.

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[1] BY MS. CORBIN:

[2] Q: So Dr Howard, does every resistor [3] — every resistor at any ohm level is used to [4] minimize the current surge from electrostatic [5] discharge?

[6] A: No.

[7] Q: And when you're using the Court's [8] interpretation, are you in any way limiting the [9] scope of that term to be limited to the [10] embodiment, the one embodiment that is described [11] of the 100 K ohm resistor in the patent [12] specification?

[13] A: No. No, of course not. But it [14] has — it has to serve the function of having a [15] significant effect, minimizing the surge [16] current.

[17] Q: And what would be the range of [18] linear resistors that you think would fit the [19] Court's definition?

[20] A: Well, I would assume that it has [21] to be large compared to the typical resistances [22] in these lines if it's going to serve any [23] function of minimizing current. And since the [24] lines have as much as 10,000 ohms, I think it

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[1] would probably need to be more than 10,000 ohms, [2] if you know, perhaps not a hundred thousand [3] ohms.

[4] Q: But is it your opinion that it [5] could be anything above 10,000 ohms?

[6] A: I think below that you're really [7] not minimizing.

[8] Q: And if you — you're not [9] minimizing the current surge from electrostatic [10] discharge?

[11] A: That's the point.

[12] Q: And if you included among all the [13] resistors that could be above 10,000 ohms — [14] strike that.

[15] If you talk about those resistors [16] that are lower than that, especially along the [17] lines of the resistance that is in the ITO [18] jumpers, does that have any impact on the [19] functionality, the intended functionality of the [20] LCD display as described in the '002 [21] specification including the '222 specification?

[22] A: You're going to have to give me [23] that again.

[24] Q: I'm sorry. It's time for lunch.

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[1] I think my blood sugar is low at this point. [2] Sorry.

[3] A: You got a lot of "ifs" in there.

[4] Q: Let me start over. [5] Well, it's going back to what we [6] were just discussing when we had your [7] side-by-side chart up of the '002 and the chart [8] of the CPT product with the ITO and the guard [9] ring.

[10] A: Yes.

[11] Q: And you had calculated that to be [12] a .1 ohm resistance?

[13] A: Right.

[14] Q: And again, in your view, does that [15] fit the Court's definition of resistance?

[16] A: No, because as I said, that's too [17] small to have any significant effect. It would [18] be a negligible effect on the current surge.

[19] Q: If you use that .1 ohm resistance [20] in the embodiment described in the '002 patent, [21] what would happen?

[22] A: Well, not only wouldn't it limit [23] the surge of current, but also you would wipe [24] out the whole idea of the structure which is to

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[1] allow testing.

[2] Q: And again, are you limiting in any [3] way using the Court's definition, are you [4] limiting in any way the circuit components that [5] would fit that definition to the specific [6] embodiment of the 100 K ohm resistor that is [7] described in patent?

[8] A: No. As I said, I can imagine [9] different resistances being used other than a [10] hundred K.

[11] Q: Let me ask you this. Are there [12] more than one way to actually form a resistance [13] as defined by the Court?

[14] A: Yes. Yes, there are.

[15] MS. CORBIN: I don't think I have [16] any further questions.

[17] THE COURT: Do you have any [18] questions?

[19] MR. BONO: I just have a very [20] simple question, Dr. Howard.

[21] BY MR. BONO:

[22] Q: Assuming the Judge was correct [23] that the term resistance cannot be interpreted [24] to be only resistor and the Judge said resistor

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[1] is too narrow a term, how would you adjust the [2] Court's definition to reflect the Judge's [3] ruling, how would you change the definition of [4] resistance?

[5] MS. CORBIN: I'm sorry, Mr. Bono, [6] would you mind repeating your quest-

ion because I [7] knocked over a cup of water here and it [8] distracted me. I apologize.

[9] MR. BONO: I'm sorry.

[10] MS. CORBIN: I'm fine. I'm fine. [11] It distracted me.

[12] BY MR. BONO:

[13] Q: Very simple question. Judge [14] Farnan said that resistance cannot be limited to [15] resistor and he said there is no support in the [16] intrinsic record for such a narrow [17] interpretation, so let's assume the Court was [18] correct in that ruling, how would you change the [19] Court's definition of resistance — can you [20] leave that there?

[21] MS. CORBIN: I'm sorry. I'm [22] sorry.

[23] Q: How would you change the Court's [24] definition of resistance to reflect accurately

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[1] the Court's rationale?

[2] A: I have to say I honestly don't [3] know, because I understand — you know, I read [4] the opinion and the basis for it, and —

[5] Q: Don't you really know, Doctor? [6] You could just take out the word "specify" and [7] you could say a circuit component that has a [8] resistance to the flow of electric current, that [9] would be one way of doing it, wouldn't it?

[10] MS. CORBIN: Objection.

[11] THE COURT: We're not objecting [12] here. Don't be so defensive. If he knows, [13] he'll tell us. This is not a legal thing going [14] on here, Doctor, it's more of a scientific [15] curiosity.

[16] THE WITNESS: If you open it up [17] that it can be a resistance, that is anything [18] that has resistance to electric current. Then [19] it really can be anything. And I think the [20] patent was trying to specify anything.

[21] THE COURT: Let's assume it was [22] trying to specify a resistor.

[23] THE WITNESS: Because the only [24] example he gave was a resistor.

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[1] THE COURT: But say we judges — [2] and there is more of them above me — don't get [3] that, and I know you as a person of science [4] might get that, what Mr. Bono's question is, so [5] take our mistake, which you have recognized in [6] your view, and how would you say it differently [7] to communicate what I thought I understood? I [8] think that's the question. How could I have [9] said it better if I didn't think it was limited [10] to resistor, if I just thought it involved the [11] resistance of the electric current?

[12] THE WITNESS: It would have to be



[13] something like a resistance sufficient to [14] satisfy all the needs of the patent, including [15] the functions as stated in the patent. And [16] those would come down to two, the limitation of [17] the surge so as to not cause destruction and to [18] allow the testing.

[19] THE COURT: And what would be [20] examples of what would fit that interpretation?

[21] THE WITNESS: It's very difficult, [22] because without using resistor, I'm sorry.

[23] THE COURT: Without using resistor [24] it's hard?

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[1] THE WITNESS: Limiting the surge [2] part, because actually to limit surge you would [3] use a device that is nonlinear and a different [4] way from a diode, it would get more resistive as [5] you increased voltage, that's the way you slow [6] down a surge, instead of becoming less [7] resistive.

[8] So if you were going to design a [9] component to be ideal in this situation, it [10] would be something that frankly I don't know how [11] to make in the technology, in this technology.

[12] THE COURT: Okay. Mr. Bono.

[13] THE WITNESS: And that's about all [14] I can say. I'm sorry.

[15] THE COURT: Could I get a C for [16] this? I just want —

[17] THE WITNESS: I thought you did [18] very well, Your Honor.

[19] THE COURT: Okay. It makes me [20] feel a little better because I was just shooting [21] for a C.

[22] Thank you.

[23] MR. RHODES: Your Honor, I have [24] just one other quick matter.

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[1] THE COURT: Sure.

[2] MR. RHODES: Sorry it's not as [3] interesting as resistors, but when Dr. Schlam [4] was deposed on June 30th, I understand that in [5] one of the exhibits that Ms. Corbin used she had [6] inadvertently, or our paralegal had [7] inadvertently included some of our work product.

[8] THE COURT: I have a rule about [9] that.

[10] MR. RHODES: We have a protective [11] order that talks about inadvertent production.

[12] THE COURT: Right.

[13] MR. RHODES: And the next day we [14] wrote and asked for it back. We didn't get it [15] back. And now we see it in one of their trial [16] exhibits. And I asked Mr. Bono if I could get [17] it back and he said no.

[18] THE COURT: I don't know the [19] provision in the protective order, but isn't [20] life stressful enough for lawyers? If it's an [21] inadvertent disclosure, I have a rule, it goes [22] back and can't be used. [23] Now if there is some question [24] about whether it was inadvertent, then I'll

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[1] listen to the discussion, but I just don't [2] understand why you just — not you personally, [3] but why any lawyer wouldn't give it back to the [4] other lawyer because I can guarantee in the [5] course of a good career, it's going to happen to [6] everybody.

[7] MS. CORBIN: More importantly, [8] Your Honor, the —

[9] THE COURT: You're getting it [10] back. You just won.

[11] Let's hear what Mr. Bono has to [12] say.

[13] MR. BONO: Your Honor, it may have [14] been initially inadvertent, but when Ms. Corbin [15] realized it at the deposition of Dr. Schlam, she [16] intentionally continued to use the document in [17] question with Dr. Schlam in the deposition [18] thereby making it no longer inadvertent.

[19] And the record — the deposition [20] will speak for itself. That's the reason why we [21] want back — I agree with Your Honor's position [22] if something is just a mistake in inadvertence, [23] you give it back. And I abide by that rule.

[24] But she affirmatively used it and

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[1] questioned Dr. Schlam at the deposition, use of [2] the document.

[3] THE COURT: No offense to [4] Ms. Corbin, that could have been excited [5] conduct. It could have been inexperienced.

[6] I'll look at the deposition. I'm [7] just saying that — that is why I am saying [8] there's no offense to that. There's a lot of [9] reasons why you could have gone and used it.

[10] I'll look at the deposition. But [11] 98 percent — and I'm glad you adhere to that, [12] because I thought you would, it just doesn't [13] happen here. And I mean, if it's work product, [14] and it went over, no matter what flowed after [15] that —

[16] MR. BONO: Your Honor, this is [17] exactly the document that was used in Court [18] yesterday, I think, which was the translation [19] document in which it was represented to the [20] Court that that was an incorrect translation, [21] and that the implication was from, I think Mr. [22] Kramer, that they had supplied us with a [23] correction or a corrected translation. We [24] received no such

corrected translation.

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[1] And Your Honor saw that the [2] certified translation, which Mr. Goodwyn used [3] with the witness, has the exact same translation [4] of the word, you know, di kang, which is what [5] this is all about, which their translation says [6] resistance.

[7] And our certified translation says [8] resistance, and we received no correction to [9] this so-called incorrect translation, which was [10] represented to the Court yesterday. And that's [11] why Your Honor ruled the document inadmissible [12] based on that representation.

[13] We have never received a so-called [14] corrected translation. So the representation in [15] Court was incorrect.

[16] MR. RHODES: This is getting a [17] little off point. I mean, number one, since [18] they have a certified translation, there's no [19] prejudice. We just want our work product back.

[20] Secondly, it's now in their PTX 36 [21] as part of a trial exhibit, our work product.

[22] MS. CORBIN: The point I wanted to [23] make, Your Honor, when it was submitted into [24] evidence, it was submitted into evidence as

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[1] Dr. Howard's report.

[2] And Dr. Howard's report never [3] included those documents. Dr. Howard's never [4] seen — I mean, these translation pages were [5] inadvertently put there by a legal assistant to [6] some exhibit pages, that the exhibits are used [7] in Dr. Howard's report. But those translations, [8] he had never seen.

[9] The translations did not appear in [10] his actual report as submitted. And I'm worried [11] about the misrepresentation of that, that [12] document with those translations being submitted [13] as Dr. Howard's report, because those documents [14] never appeared in Dr. Howard's report before the [15] error was made.

[16] And that document was used in the [17] deposition with those pages inadvertently put [18] there.

[19] THE COURT: Here's what I'm going [20] to do. I'm going to look at deposition use, [21] your use of the deposition to see if there's [22] some sort of a subsequent waiver of the work [23] product privilege by the use of the document [24] that is clearly intentional, and therefore,

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[1] would constitute a waiver.

[2] If that's not there, then it will [3] be

withdrawn, because it's an inadvertent [4] production.

[5] MS. CORBIN: Right. And even if [6] Your Honor were to find to the contrary, which I [7] don't think you would, we would still ask that [8] those documents, if they're to be used, be used [9] separate and apart and not represented as part [10] and parcel of Dr. Howard's report when they [11] clearly were never there in his report as [12] submitted.

[13] MR. BONO: I don't have a problem [14] with — there was a translation of an exhibit in [15] his report. We can certainly, you know, parse [16] that out and not use it in conjunction with the [17] report. It was the way it was marked in the [18] deposition by Ms. Corbin as to why it was marked [19] that way as a trial exhibit.

[20] I'll be happy to recast the [21] exhibit and just use the exhibit to his report [22] with the translation, if Your Honor were to rule [23] that it's a waiver.

[24] THE COURT: It's not a waiver.

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[1] MR. BONO: It's not a waiver.

[2] THE COURT: Yes. That's the issue [3] I'm going to look at when you give my law clerk [4] the deposition or the script of it. Yes.

[5] MR. RHODES: I have one other [6] request. Can you charge this time to Mr. Bono, [7] please?

[8] THE COURT: I'm working to get him [9] more time. What I'll do is since I gave the [10] jury an extra 15 minutes for lunch thinking that [11] my conversation with Dr. Howard would take five [12] or ten minutes, I'm not going to charge this [13] time to anybody. So anybody — nobody should [14] get agitated during lunch. It's, like, free.

[15] MS. GABLER: Thank you, Your [16] Honor.

[17] THE COURT: All right. We'll be [18] in recess.

[19] THE CLERK: All rise.

[20] THE COURT: All right. The jury [21] is on its way in.

[22] Jury entering the courtroom at [23] 1:35 p.m.)

[24] THE COURT: All right. Be seated,

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[1] please. Good afternoon.

[2] BY MS. CORBIN:

[3] Q: Good afternoon, Dr. Howard.

[4] A: Good afternoon.

[5] Q: So we're going to pick up now and [6] change subjects to issues of validity. And were [7] you asked to evaluate the validity or invalidity [8] of the '002 patent?

[9] A: Yes, I was.

[10] Q: And what did you review in [11] connection with forming your opinion in that [12] regard?

[13] A: Well, again, I reviewed the patent [14] and including the '222 part of the patent, and I [15] looked at the prosecution history to see what [16] the patent office had looked at, I reviewed [17] those. I reviewed additional prior art that was [18] provided by your law firm, and a lot of other [19] documents, anything that might be relevant.

[20] Q: So when you reviewed the file [21] history, that included the references, the prior [22] art references that were in that file?

[23] A: Yes.

[24] Q: And what is your opinion with

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[1] respect to the validity of Claims 1 and 8?

[2] A: Well, I guess the first point to [3] make is that CPT simply practices the prior art, [4] it's very clear when you read the prior art. [5] CPT is practicing the prior art.

[6] And so if somehow the '002 patent [7] is stretched to cover CPT, then it has to cover [8] the prior art. And in that case, the patent is [9] invalid.

[10] Q: Okay. We'll get into that in a [11] little bit more detail, but just again, talking [12] about the file history, and I want to talk now [13] about what the patent examiner had at the time [14] that he was having to consider whether or not to [15] issue the claims in the '002 patent.

[16] First of all, did the inventor [17] here provide even a single prior art reference [18] to the examiner?

[19] A: No, he did not.

[20] Q: And was the examiner able to find [21] any references on his own?

[22] A: Yes, he did.

[23] Q: How many references?

[24] A: He found five references.

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[1] Q: And how do you know that?

[2] A: It's listed in the file history.

[3] Q: Could we see slide five, please. [4] Is this a document to which you [5] are referring from the '002 file history?

[6] A: Yes, it is.

[7] Q: And what is this document?

[8] A: It's — I don't know what the [9] legal term for it, but it's the point in all [10] these file histories where the examiner list [11] what he has examined in making his judgment.

[12] Q: And do you understand — what is

[13] your understanding as to whether or not the [14] examiner is required to write down everything [15] that he had available and which he considered [16] during the examination?

[17] A: My understanding is that he's [18] required to keep a record of that in this form [19] of everything he used.

[20] Q: So these are the five references [21] he used?

[22] A: Yes.

[23] Q: Are any of these Japanese [24] references?

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[1] A: No, they're not.

[2] Q: And we're going to get in detail [3] into the prior art references that form the [4] basis of your opinion that — about invalidity. [5] What are those four references?

[6] A: Well, there is one referred to as [7] Okawa, Kawamura, Oritsuke and Yudasaka.

[8] Q: And do we see any one of those [9] four references listed among the references that [10] the examiner had available to him when he had to [11] decide whether to issue these claims?

[12] A: No, you do not.

[13] Q: When you say that CPT practices [14] the prior art, do you have any reference, prior [15] art reference in particular in mind?

[16] A: Well, in particular the Okawa [17] reference.

[18] Q: And have you prepared a slide to [19] show the comparison between the teachings of the [20] Okawa prior art references and the CPT products?

[21] A: Yes, I have.

[22] Q: Could we see slide 142, please. [23] Is this that document?

[24] A: Yes, it is.

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[1] Q: Could you explain what is depicted [2] here?

[3] A: On the left-hand side it depicts [4] again how CPT makes individual interconnection [5] couplings of lines to the outer guard ring [6] through diodes. On the right-hand side, this is [7] from the reference Okawa, and it shows that he [8] connects individually each line both rows and [9] columns to the outer guard ring via diodes.

[10] Q: And turning again to Dr. Schlam's [11] infringement opinion, do you understand him to [12] be saying that the interconnection requirement [13] of Claim 1 is found in the diodes?

[14] A: I understand that that's where he [15] finds it.



[16] Q: And one of the places in which he  
[17] finds the resistance element do you  
understand [18] is also in the diodes?  
[19] A: Yes.  
[20] Q: And are we able to see that in his  
[21] — the diagram that he drew during  
his [22] deposition?  
[23] A: The one that we showed earlier.  
[24] Q: Can we show Defendants' Exhibit

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[1] 73, please.  
[2] A: Yeah, here is where he identified [3]  
the resistances that he says satisfy the [4]  
limitation of the resistance in the claim.  
And [5] it's found both in the diodes and  
within the [6] guard ring.  
[7] Q: And in reading his deposition, [8]  
where on his diagram does he say that  
you find [9] the interconnection re-  
quirement?  
[10] A: He says you find the [11] inter-  
connection requirement by going  
through [12] diodes through the guard  
ring and through [13] diodes.  
[14] Q: And how has he labeled those [15]  
diodes in his picture?  
[16] A: He labels them shunt switching  
[17] elements.  
[18] Q: If we could go back to 143. [19]  
Sorry, 142.  
[20] And again these are the diode — [21]  
the diode we were speaking about, you  
indicated [22] one of those is in the red?  
[23] A: That's right.  
[24] Q: What corresponding element is in

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[1] the Okawa reference?  
[2] A: It's this element here.  
[3] Q: And what are those?  
[4] A: Those are diodes.  
[5] Q: Okay. Let's turn, then, to [6] talking  
about the Okawa reference particularly.  
[7] That reference, have you prepared a  
slide to [8] assist in telling us about what  
the Okawa [9] reference teaches?  
[10] A: Yes.  
[11] MS. CORBIN: Could we see 143, [12]  
please?  
[13] BY MS. CORBIN:  
[14] Q: First of all, what is the Okawa [15]  
reference?  
[16] A: Well, first of all, it's a [17] Japanese  
patent application publication.  
[18] Q: And what is the date on which this  
[19] application published?  
[20] A: August 1987.  
[21] Q: And remind us, again, what was  
the [22] filing date of the '002 patent?  
[23] A: July 1988.  
[24] Q: So could you tell us, then, what

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[1] it is that the Okawa reference teaches?  
[2] A: Yes. It first discloses a prior [3] art  
method shown down here in — in this  
figure, [4] including an outer guard ring  
for prevention of [5] electrostatic des-  
truction of active-matrix [6] display pane-  
ls. So it's on this same topic.  
[7] In the case of the prior art, it [8] shows a  
conductor is used to connect individual  
[9] gate lines and individual source lines  
to this [10] outer guard ring.  
[11] And furthermore, that this — in [12]  
the prior art, this outer guard ring is  
removed [13] at the end of the man-  
ufacture.  
[14] Q: Okay. So when you say it [15]  
discloses prior art, the Okawa reference  
itself [16] is referencing prior art that  
existed before the [17] Okawa reference;  
is that right?  
[18] A: That's right. That's right.  
[19] Q: Okay. And this was what was [20]  
described in connection with that prior  
art?  
[21] A: Yes.  
[22] Q: Okay. And then what else does the  
[23] Okawa reference teach?  
[24] MS. CORBIN: Can we have the next

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[1] slide, please?  
[2] THE WITNESS: Well, what Okawa is  
[3] offering is an improved method  
where he can [4] provide protection  
during manufacture which [5] builds on  
that prior art, but also allows for [6]  
testing.  
[7] Q: When you say it refers to testing, [8]  
are you referring to the two-point bulk  
testing [9] that we talked about with the  
'002 patent?  
[10] A: No. It doesn't allow that kind of [11]  
bulk two-point testing. This only allows  
the [12] individual two-point testing of  
line by line [13] crossover by crossover.  
[14] Q: So —  
[15] A: But it does allow testing. And as [16]  
opposed to the prior art, which didn't  
allow any [17] testing.  
[18] Q: That you were just discussing in  
[19] reference to the earlier previous  
page?  
[20] A: Yes.  
[21] Q: Okay. How — in the Okawa [22]  
reference, how is that testing done?  
[23] A: It's done two-point line by line.  
[24] Q: Each of the — you described

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[1] thousands of gate and source lines  
would be [2] tested individually?  
[3] A: Yes.

[4] Q: And how is the testing done, [5]  
again, in the CPT product?  
[6] A: That's the way it's done in the [7]  
CPT product.  
[8] Q: And then what is shown in the [9]  
Okawa reference with respect to the  
coupling of [10] the gate lines and the  
source lines to the outer [11] guard ring?  
[12] A: Well, what's shown is the — as I [13]  
showed in that figure, the coupling is [14]  
individually through the diodes to the  
outer [15] guard ring.  
[16] Q: Okay. So if we look at Slide 145, [17]  
what does this depict?  
[18] A: Well, this is just a comparison [19]  
with the prior art. And then Okawa's [20]  
improvement, again.  
[21] The prior art, all the connections [22]  
are with the conductors. And as a result,  
[23] everything is shorted together, and  
you cannot [24] do testing of any kind on  
this one.

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[1] Over here, Okawa then adds diodes, [2]  
so that he can test each line individually  
[3] without having to couple. So that for  
low [4] voltages, current would not flow  
from here [5] around here, because the  
diode is a gate, and it [6] would prevent  
current flow at low voltages for [7]  
testing purposes.  
[8] Q: Okay. So do I understand you that  
[9] both of these embodiments of prior  
guard rings [10] are disclosed in the  
Okawa reference?  
[11] A: Yes, both these, the prior art and  
[12] this are both disclosed in the Okawa  
document.  
[13] Q: Okay. And did you prepare a chart  
[14] to show where in the Okawa re-  
ference you are [15] finding each of the  
elements of Claim 1?  
[16] A: I did. Yes.  
[17] MS. CORBIN: Can we have Slide [18]  
146, please?  
[19] BY MS. CORBIN:  
[20] Q: Okay. If we start at the top, we [21]  
have the preamble, a method of man-  
ufacturing [22] active-matrix display  
backplanes and displays [23] there from.  
Do you understand the preamble to [24]  
be a limitation of the claim?

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[1] A: No, it's not.  
[2] Q: But do you, nevertheless, find in [3]  
the Okawa reference reference that in  
that [4] specification that it is related to a  
method of [5] manufacturing active-mat-  
rix display backplanes?  
[6] A: Yes, I do. And as shown here, [7] it's  
on Page 2. If we could see that.  
[8] MS. CORBIN: If we could see page [9] 2  
of the Okawa reference.

[10] THE WITNESS: And so you can see here [11] it's talking about the manufacturing process of [12] a display apparatus. And up here an [13] active-matrix display apparatus. So it's pretty [14] clear that's what is covered.

[15] BY MS. CORBIN:

[16] Q: Okay. And going back to Claim 1, [17] which is 146, we see the first element, [18] providing a substrate.

[19] And where do you find that, [20] evidence of that in the Okawa reference?

[21] A: On Figure 4, Page 5. Yeah, this. [22] Right.

[23] This figure here. It's been [24] colored in. This document is black and white.

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[1] Q: So you added the color for [2] illustration?

[3] A: Yeah, I added that, too. But [4] what's shown here, I'm not sure you can make [5] that out. But that's — that's a number four [6] indicating what this is.

[7] And then going back in the text to [8] Page 3, we can find that that four is a [9] substrate on which active components and the [10] like are formed.

[11] Q: Okay. And if we turn to the next [12] element, forming a pattern of pixels on said [13] substrate, where do you find evidence of that in [14] the Okawa reference?

[15] A: In Figure 1.

[16] Q: Is that on page four?

[17] A: I think that's page four, yeah. I [18] should have put that down there.

[19] Q: Yes.

[20] A: Yes. So this shows as with many [21] of the others that we've looked at, this pattern [22] of pixels, and it also will show the rows and [23] columns.

[24] Q: So the first part of step three is

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[1] the forming a plurality of row and column [2] interconnecting pixel activation lines, do you [3] see that Figure 1 of Okawa?

[4] A: Yeah, because here you got row [5] line and column line, and again these are not [6] intended to be connected, these are just [7] crossing with insulation.

[8] Q: Okay. And then when we turn to [9] the second part of step three, and this is the [10] interconnecting substantially all of the row [11] lines and interconnecting substantially all of [12] the column lines, where do you find proof of [13] that in the Okawa reference?

[14] A: It's Figure 1. If the '002 patent [15] is judged to cover diodes as a means of [16] interconnection, then this has the same means as [17] in CPT's products, that is

through diodes.

[18] Q: And do you also see that in Figure [19] 2?

[20] A: Yes, Figure 2.

[21] Q: That's on page five?

[22] A: Right. And here are the diodes.

[23] Q: And then forming an outer [24] electrostatic discharge guard ring on said

Page 1619

[1] substrate coupled to said inter-connected row and [2] column lines via a resistance, where do you find [3] evidence of the resistance in the Okawa [4] reference?

[5] A: Well, again, if the resistance is [6] considered to be in the diodes, then of course [7] we can see in Figure 1 and Figure 3 that the [8] Figure 1 shows the diodes here, and Figure 3 —

[9] Q: Sorry, we mean Figure 2.

[10] A: That's supposed to be Figure 2. [11] Here are the diodes again. So again —

[12] Q: Is it the diodes that LPL is [13] accusing of being the resistance element in the [14] CPT product?

[15] A: Yes. CPT is basically doing the [16] same thing as Okawa.

[17] Q: And then the last step, removing [18] said outer guard ring and row and column [19] interconnections prior to completion of the [20] display, where are you finding that in the text?

[21] A: Let's look at Figure 2, so this — [22] remember this was an improvement over this, the [23] prior art. And so again, Okawa has designed [24] this so that it can be used during manufacture,

Page 1620

[1] but then you would come in kind of the same way [2] in the end of manufacturing.

[3] Q: What is the implication to you of [4] Okawa being an improvement, that the design of [5] Figure 2 being an improvement over the prior art [6] discussed in the Okawa which is represented in [7] Figure 5?

[8] A: I think that's — well —

[9] Q: Is there a portion of the [10] specification —

[11] A: There is a portion of the text, [12] but I can't —

[13] Q: Okay. In your chart you have [14] marked pages two, three and four. Shall we look [15] at page two.

[16] A: Let's look at page two. And it [17] said — this is referring to prior art, said [18] connection is removed after the manufacturing [19] process is completed. Then the next part.

[20] Q: Top of page three.

[21] A: Top of page three, it's basically [22] pointing out that this is an improvement over [23] the prior art. It's desirable in terms of cost [24] and reliability for display panel beset with any

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[1] such problems like bus lines and short circuits [2] to be removed from the manufacturing process [3] lines, so that's the motivation for testing.

[4] However, a problem with the [5] conventional methods for the prevention of [6] electrostatic destruction is that since when [7] they're all connected, it's not possible to [8] detect those particular defects mentioned up [9] here.

[10] Q: And on page four, is that an [11] additional place where you cited as having [12] evidence of the intent to remove the ring of [13] Okawa?

[14] A: Yes. Here it says thereby [15] preventing their breakdown while allowing the [16] measurement of the components' properties during [17] the manufacturing process which with the [18] conventional construction has been difficult.

[19] Q: And what is the implication of [20] that to you in terms of the removal step?

[21] A: That the protection was intended [22] during the manufacturing process, and that it [23] would be removed thereafter. So it's simply to [24] allow testing as opposed to operation.

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[1] Q: Okay. And did you prepare a [2] summary chart, then, of whether you find and [3] where you find the — strike that.

[4] Did you prepare a chart to show [5] whether you find each and every element of Claim [6] 1 in the Okawa reference?

[7] A: Yes, there is a summary chart.

[8] Q: 265. [9] And we have just gone over this. [10] If the diodes are deemed as LPL alleges to be [11] the interconnecting requirement of step three, [12] four and five, and also the resistance of step [13] four, what is your opinion with respect to the [14] validity of Claim 1 in light of the Okawa [15] reference?

[16] A: Well, then, Claim 1 is invalid by [17] being anticipated by Okawa.

[18] Q: And what does it mean to be [19] anticipated?

[20] A: Well, it basically means you can't [21] invent something that's already been invented. [22] And so if everything is there in a prior [23] publication, then it's not eligible for a [24] patent.

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[1] Q: When you say when everything is



[2] there, you're referring to every step of the [3] claim?

[4] A: Yeah. Even if Okawa didn't [5] receive his patent, it became public knowledge [6] and so no one else can then go and patent that.

[7] Q: Now, I want to talk to you about [8] Claim 8. And is Claim 8 an independent claim or [9] a dependent claim?

[10] A: Claim 8 is a dependent claim.

[11] Q: So you understand, then, that it [12] has all the elements of Claim 1 that we were [13] just looking at plus it adds a limitation?

[14] A: Plus it adds a limitation.

[15] Q: Can we see slide 147. [16] Is this the limitation that is [17] added by Claim 8, the language of Claim 8?

[18] A: Yes, it is.

[19] Q: And what is that additional [20] limitation?

[21] A: Well, it describes, "Forming an [22] inner electrostatic discharge guard ring on said [23] substrate coupled to said row and column lines [24] via shunt switching elements to provide

Page 1624

[1] protection from electrostatic discharges between [2] said row and column activation lines during [3] manufacture of the displays and thereafter."

[4] Q: Let me ask you this question first [5] as it relates just to the limitation added in [6] this language of Claim 8. If this limitation [7] was redrawn as an independent claim, so it was [8] the only limitation of the claim, would that [9] claim be valid?

[10] A: No, it would not because of the [11] prior art.

[12] Q: Which prior art are you referring [13] to?

[14] A: I'm referring to Oritsuke and [15] Yudasaka.

[16] Q: And what is taught by those two [17] references?

[18] A: They both teach an inner guard [19] ring with lines where lines are coupled via [20] shunt switching elements to an inner guard ring.

[21] Q: For what purpose?

[22] A: For the purpose of preventing [23] damage from electrostatic discharge.

[24] Q: Okay. Have you prepared a slide

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[1] — well, let me ask you: What is your opinion [2] with regard to the validity of Claim 8, which [3] includes all of the elements of Claim 1, plus [4] this additional limitation that we see here on [5] this screen?

[6] A: Well, my view is that it's obvious [7]

from the Oritsuke and Yudasaka in view of [8] Kawamura and Osaka.

[9] MS. CORBIN: Slide 148.

[10] BY MS. CORBIN:

[11] Q: Are these the references you're [12] referring to?

[13] A: Yes.

[14] Q: And what kind of rings do Kawamura [15] and Osaka have?

[16] A: They both have the outer guard [17] ring.

[18] Q: What about Yudasaka and Oritsuke?

[19] A: These two references describe [20] inner guard rings

[21] Q: And when you say that Claim 8 is [22] obvious, can you explain what you mean by [23] obvious?

[24] A: Well, if something — if you have

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[1] two patents and you present them to someone of [2] ordinary skill of the art, if it becomes obvious [3] that those could be combined, then you can't get [4] a new patent.

[5] You know, obvious to one in [6] ordinary skill in the art, then it should not be [7] granted a separate patent for just combining [8] them.

[9] Q: And when you do the obviousness [10] analysis, do you presume that the person of [11] ordinary skill in the art has the references — [12] has knowledge of the prior art references?

[13] A: Yes, you do.

[14] Q: And does that change if the [15] references were not actually widely known at the [16] time?

[17] A: No, not under the law, it doesn't. [18] No.

[19] Q: Okay. So how did you define the [20] skill of one of ordinary skill in this art at [21] the time of the '002 invention?

[22] A: Well, I — I defined it as someone [23] with a bachelor's degree in engineering or [24] physical science, and at least one year of

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[1] experience in the LCD, you know, flat panel [2] business.

[3] Q: And did that comport with the way [4] in which Dr. Schlam defined the person of [5] ordinary skill in the art for purposes of the [6] validity analysis in this case?

[7] A: Yes, except that he said one to [8] two years. So I don't think that's a [9] substantial disagreement.

[10] Q: One to two years of experience?

[11] A: One to two years of experience.

[12] Q: But, otherwise, the background,

[13] the educational background was the same?

[14] A: Yes.

[15] Q: Okay. Let's walk through the [16] other references that you refer to as rendering [17] obvious Claim 8 starting with Kawamura.

[18] MS. CORBIN: Slide 149.

[19] BY MS. CORBIN:

[20] Q: What is the Kawamura reference?

[21] A: That's another — blow it up, [22] please. That's another Japanese application [23] publication dated May 1988.

[24] Q: Okay. And what does that

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[1] reference, the Kawamura reference teach?

[2] A: It's another method for flat panel [3] display manufacturing. It's directed at the [4] problems of ESD, reducing defects, cost caused [5] by ESD, and he claims that it — that such [6] protection would reduce cost and improve [7] productivity. That is, it would improve yield.

[8] Q: And where does he discuss that?

[9] A: That's on Page 9.

[10] Q: And what else does it teach?

[11] A: And it also teaches an outer guard [12] ring that's removed after manufacture.

[13] Q: Okay. Where is that found in the [14] reference?

[15] A: That's on Page 5.

[16] MS. CORBIN: Next page, please.

[17] BY MS. CORBIN:

[18] Q: And what else does the Kawamura [19] reference teach us about outer guard rings?

[20] A: Well, it also includes this idea [21] that gate lines are interconnected and row lines [22] are interconnected in a serpentine fashion to [23] allow convene two-point testing methodology that [24] we heard — we've talked about earlier. The

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[1] array testing.

[2] Q: So where do you see — is this a [3] figure from Kawamura?

[4] A: Yeah, this is one of the figures [5] from Kawamura. And this is the inner ring here.

[6] And so each line — I'm sorry. [7] This is the removable ring. Outer ring.

[8] Each line is coupled to the ring [9] with diodes.

[10] Q: And where do we see this [11] serpentine, the interconnection in the [12] serpentine fashion that you've referenced?

[13] A: Well, if you look at this, the row [14]

lines here, these connections on the ends here [15] form this serpentine interconnection for, and [16] the same with the column lines for purposes of [17] testing of the type that we talked about, a [18] two-point bulk testing.

[19] Q: And again, what does that mean to [20] you in terms of what you can test with the [21] two-point test?

[22] A: With the two-point test, you can [23] test whether there's a break in any of these [24] lines, rows and columns. You can test whether

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[1] there's any breakdown of insulation at the [2] intersections, which are supposed to be [3] insulated, we said many times.

[4] And if you had liquid crystal on [5] there, you could also test the pixels.

[6] Q: So with just two points in the [7] Kawamura reference, are you able to test the [8] entire display at one time?

[9] A: Yes.

[10] Q: And how are the — oh, and you [11] mentioned the interconnecting gate lines and row [12] lines are coupled to the guard ring through the [13] diodes?

[14] A: That's right.

[15] Q: Okay. And do you also have a [16] chart for the Okawa reference showing how it [17] matches the elements of Claim 1?

[18] A: For the Kawamura reference?

[19] Q: Yes.

[20] A: Yes.

[21] MS. CORBIN: Okay. 153.

[22] BY MS. CORBIN:

[23] Q: And if we start again with the [24] preamble, which is about the method of

Page 1631

[1] manufacturing active-matrix display backplanes. [2] Where are you finding reference to that in the [3] Kawamura prior art?

[4] A: On Page 2. So it's a Method for [5] Manufacturing Active Matrix Driven Apparatus.

[6] Q: Okay. And what about the element [7] providing a substrate, is that also on Page 2?

[8] A: That's on Page 2. There it is. [9] Whoops. Something happened here. [10] Oh, here.

[11] Method of manufacturing and then [12] using an active matrix array substrate.

[13] Q: Okay. What about the formation of [14] — sorry — forming a pattern of pixels on said [15] substrate?

[16] A: That would be on Figure 3. Yes. [17] This shows these pixels, and then these — these [18] are supposed to be like ditto marks that you [19] should see the same

thing everywhere.

[20] Q: And what about the formation of [21] the plurality of row and column intersecting [22] pixel activation lines?

[23] A: And that's also shown here with [24] this plurality of rows and plurality of columns.

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[1] Q: And what about the second part [2] about the interconnecting substantially all of [3] said row lines to one another and [4] interconnecting substantially all of said column [5] lines to one another?

[6] A: And —

[7] Q: Could we see that in Figure 3, [8] also?

[9] A: Yeah, that's in Figure 3, also. [10] And these are the interconnections that form in [11] this case serpentine interconnection down here [12] for the columns, and up here.

[13] Q: Is that the same serpentine [14] connection that we saw described in the '222 [15] patent which is incorporated by reference in the [16] '002 patent?

[17] A: Yes, it is.

[18] Q: When we turn to the fourth step of [19] Claim 1, forming the electrostatic discharge [20] guard ring and coupling that to the [21] interconnected row and column lines via a [22] resistance, where do you find that in this [23] reference?

[24] A: Well, if the '002 claim is

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[1] stretched to cover diodes as a means of [2] interconnection and — but more important here, [3] resistance, then it's found in these diodes of [4] Kawamura.

[5] Q: What about the removing of the [6] said outer guard ring and the row and column [7] interconnections?

[8] A: Yeah, there is a reference to [9] that.

[10] Q: On page two?

[11] A: Page two. Down here, this [12] paragraph here, the severance of the connection [13] established, et cetera, is accomplished by [14] removal by etching of the wiring materials in [15] said exposed portions. And while it shows only [16] small amounts of metal being removed in the [17] figure, it up here says so at least portions of [18] those wires would be removed, meaning you could [19] remove much more than is indicated.

[20] Q: If you look at the entirety of [21] page two, are we in the section that is the [22] claims of the patent?

[23] A: Yes.

[24] Q: So that what we were looking at

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[1] was actually Claim 2 of this Kawamura reference?

[2] A: That's correct.

[3] Q: And then if we could look at [4] Yudasaka quickly. Yudasaka 154.

[5] And what is this reference?

[6] A: This is another Japanese patent [7] application publication.

[8] Q: And what is the publication date?

[9] A: The publication date is July of [10] 1984, shown up here.

[11] Q: Four years earlier than the '002 [12] patent?

[13] A: Yes.

[14] Q: And what does that reference [15] teach?

[16] A: It teaches again a method to [17] provide ESD protection to achieve active matrix [18] display during and after manufacture.

[19] Q: How is that accomplished?

[20] A: That's accomplished by using an [21] inner ring coupled to row and column lines via [22] diodes.

[23] Q: How does CPT attach its row and [24] column lines to the inner ring?

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[1] A: By way of diodes.

[2] Q: Can we — have you prepared a [3] chart again to show how that reads against the [4] new limitation added by Claim 8?

[5] A: Yes.

[6] Q: Okay. The first part, forming an [7] inner electrostatic discharge guard ring on the [8] substrate, where do you find that in the [9] Yudasaka reference?

[10] A: Let's look first at Figure 2 on [11] page five. And it's been highlighted here, but [12] it's there in the black and white, this is what [13] he refers to as the inner ring.

[14] Q: The pink portion?

[15] A: The pink portion is the inner [16] ring.

[17] Q: Okay. And then where it says [18] coupled to said row and column lines via shunt [19] switching elements, where are you finding that [20] in the Yudasaka reference?

[21] A: And that's shown here in the blue. [22] It's very difficult to see, I know, but each row [23] and each column is coupled to that line, that [24] pink line, through these diodes.

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[1] Q: How does that compare to what CPT [2] does in the coupling of its row and column lines [3] to the inner guard ring?

[4] A: It's the same.

[5] Q: And where in the Yudasaka [6] reference do you find that the purpose



of the [7] invention is to provide protection from [8] electrostatic discharges between said row and [9] column activation lines during manufacture of [10] the displays and thereafter?

[11] A: Text on page three. When the [12] assembly of the active matrix is completed with [13] connections being made into peripheral circuits [14] and the like it's preferable to connect wiring [15] A, which is that ring, to a ground potential as [16] well. The protection circuit according to the [17] present invention will then work not only [18] against electrostatic charges, but also against [19] surges that enter through the peripheral [20] circuits.

[21] So this is describing how this is [22] to be used even after you have the peripheral [23] circuits on there, which means after [24] manufacture.

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[1] Q: And then the last one is the [2] Oritsuke reference. We could look at slide 157.

[3] What is the Oritsuke reference?

[4] A: Once more it's a Japanese patent [5] application publication dated January 1988.

[6] Q: Are you surprised that so many of [7] these references are Japanese?

[8] A: Not really, not having worked with [9] the Japanese during that period, that's where [10] the action was, really.

[11] Q: And in terms of prior art, do [12] foreign references from countries other than the [13] U.S. constitute prior art?

[14] A: Oh, yes. Yes. References from [15] anywhere in the world can constitute prior art.

[16] Q: If we could go back to slide five. [17] And if we could zoom in on the middle portion of [18] that document there. Do you see where it says, [19] "Foreign Patent Documents"?

[20] A: Yes.

[21] Q: Were any foreign patent documents [22] considered by the examiner when he was [23] considering whether or not to issue the claims [24] of the '002 patent?

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[1] A: It appears not.

[2] Q: I'm sorry, going back to 157. [3] And what does the Oritsuke [4] reference teach?

[5] A: Well, again, it teaches a method [6] to provide a flat panel display that protects [7] active components from electrostatic destruction [8] during and after manufacture, and this is [9] accomplished by forming an inner guard ring [10] coupled to row and column lines via diodes.

[11] Q: And do we see that inner ring on [12] that figure from Oritsuke there?

[13] A: Yes, that's shown there in yellow, [14] the inner ring. And then the diodes are shown [15] in I guess red coupling each line, so each row [16] and each column to that ring through diodes.

[17] Q: And what's the significance of the [18] elements that have been highlighted in blue?

[19] A: Well, the significance of that is [20] that this reference to the external circuitry, [21] and so this indicates that this is intended for [22] protection after the display has been completed [23] and has its external circuitry.

[24] Q: And you have prepared a chart on

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[1] Oritsuke as well?

[2] A: Yes.

[3] Q: 159. [4] And other than in the Figure 5 we [5] have just shown, was there other support for the [6] formation of an inner electrostatic discharge [7] guard ring on the substrate?

[8] A: Figure 1, page seven, so here [9] again the red indicates inner ring.

[10] Q: Can you also see the inner ring [11] coupled to said row and column lines via shunt [12] switching elements?

[13] A: Yes. Again, here the blue is [14] highlighting the shunt switching elements [15] coupling each line, rows and columns to the [16] inner ring.

[17] Q: What are those switching elements?

[18] A: They're transistors.

[19] Q: And finally to provide protection [20] from electrostatic discharge between said row [21] and column activation lines during manufacture [22] of the displays and thereafter, how do you know [23] that this is intended to be providing protection [24] from electrostatic discharge?

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[1] A: The electrostatic discharge —

[2] Q: I think in your chart, could you [3] go back to 159. It indicates pages four and [4] five.

[5] A: Right.

[6] Q: Page four, please.

[7] A: Yeah. This indicates the object [8] of the present invention is to provide a flat [9] display that protects active components from [10] electrostatic destruction, so that's a [11] protection element.

[12] Q: How do you know that it's [13] intended, that ring, to remain after [14] manufacture?

[15] A: Because it talks about the problem

[16] with displays as described above is destruction [17] or the deterioration in the performance of [18] active components by static electricity created [19] during the manufacturing process or during [20] installation to or removal from a panel. So [21] that means after the manufacturing process.

[22] Q: Okay. Have we now walked through [23] each of the four references that form the basis [24] of your conclusion that Claim 8 is obvious?

Page 1641

[1] A: Yes.

[2] Q: I want to turn to the fact that [3] you understand, Dr. Howard, that Claim 8 [4] includes all the limitations of Claim 1, plus [5] the additional limitations found in Claim 8?

[6] A: Yes, I do.

[7] Q: So do you understand, how many [8] rings are found within Claim 8?

[9] A: Within Claim 8 there are two [10] rings.

[11] Q: And what are those rings?

[12] A: The outer guard ring and the inner [13] guard ring.

[14] Q: And do you find the outer guard [15] ring and the inner guard ring in any of the four [16] — together in any of the four references that [17] we've just discussed?

[18] A: Not together.

[19] Q: And how is it, then, that you are [20] able to conclude that nevertheless the [21] combination of these four references, the [22] Kawamura and Okawa reference that had the outer [23] guard rings and the Yudasaka and the Oritsuke [24] that had the inner guard rings, render this

Page 1642

[1] claim obvious?

[2] A: Well, because one of ordinary [3] skill in the art working at that time, if [4] presented with these inventions, would recognize [5] that each offered benefit, and they could [6] clearly have been combined. And since there was [7] so much concern about yield and perfection of [8] displays, it would be, to me, obvious to one of [9] those people to combine them.

[10] Q: And when you say that there was so [11] much concern about the perfection of these [12] displays, what do you mean?

[13] A: Well, it's even pointed out in the [14] '002 patent that, you know, one — one — damage [15] to — one damaged element can mean the [16] destruction of the whole display in a display [17] like this.

[18] Q: When you say "damaged element"



[19] you're referring to one pixel or one picture [20] element?

[21] A: The one-pixel element, or even [22] worse if you have a damaged inter-section.

[23] Q: Okay. And what was the nature of [24] the problem to be solved by the Kawamura and

Page 1643

[1] Okawa references that teach the outer guard [2] ring?

[3] A: The nature of the problems we [4] solved was this damage from electrostatic [5] discharge.

[6] Q: And what was the nature of the [7] problem to be solved by the Yudasaka and [8] Oritsuke references, which teach about the inner [9] guard ring?

[10] A: The same problem.

[11] Q: And what was the time period where [12] people of ordinary skill in the art, again, now [13] prior to the '002 invention, recognition of what [14] time period you should protect against ESD [15] protection?

[16] A: Could you go through that again?

[17] Q: Yes. [18] Was there knowledge of those of [19] skill in the art that you needed to protect [20] against ESD during manufacturing?

[21] A: Yes.

[22] Q: And did we see that in the [23] references that we just discussed?

[24] A: Yes. All those different

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[1] references have their recognition as prior to [2] that.

[3] Q: And was there recognition in these [4] references and acknowledged by those of skill in [5] the art that there was a need to protect against [6] electrostatic discharge after manufacturing?

[7] A: Well, certainly some of the [8] references recognized that. I'm not sure [9] whether everyone recognized that, but we have [10] two references that recognized that.

[11] Q: And in this field of active-matrix [12] displays, given the problems that you've [13] discussed of one damaged element causing you to [14] discard the entire display, what would be — [15] what would provide the motivation for one of [16] ordinary skill to combine these references?

[17] A: Well, if you have such a severe [18] problem and people are offering two different [19] approaches to the problem, and it's clear that [20] you could combine them, then I think an engineer [21] who's being measured on how many defects are [22] coming out of the line might be motivated to [23] combine them.

[24] Q: Were there other redundancy

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[1] techniques that you're aware of, in the [2] active-matrix display area, that were added to [3] protect the components of the display?

[4] A: Well, yes. In fact, in the '002 [5] patent, there's a discussion of redundancy [6] techniques to make the appearance of the display [7] be more resistant to presence of some defects.

[8] Q: And when you add the outer ring to [9] the inner ring, is there any additional variable [10] cost involved in the manufacture of an active [11] matrix display that has both rings?

[12] A: No. There's not necessarily any [13] additional costs.

[14] I mean, the same process. It's [15] just changing the masks basically.

[16] Q: And once changed, the mask, as you [17] manufacture that product, is there anymore [18] variable cost in producing an active-matrix [19] display with two rings as opposed to one that [20] only had one outer — either the outer ring [21] alone or the inner ring alone?

[22] A: No. When you process a plate [23] through one of these lines, it's costing you so [24] much to process it. And it's independent of the

Page 1646

[1] pattern.

[2] If you put it through there, and [3] all you put on there is your name or something, [4] it's going to cost the same amount of money.

[5] Q: When you — you mentioned these [6] mask steps, and are those mask steps used to [7] form the gate lines and source lines that are [8] part of the — of Claim 1?

[9] A: The masks. Yes, those are the [10] ones that we went through in the mask files.

[11] Q: And they're also used to form the [12] diodes that couple those lines —

[13] A: Yes.

[14] Q: — to the outer guard ring?

[15] A: Yeah. All —

[16] Q: Sorry.

[17] A: All the steps that we showed in [18] the mask files.

[19] Q: And those same — are those same [20] mask steps used to form the outer ring and the [21] inner ring?

[22] A: Yes.

[23] Q: Are any additional mask steps [24] involved?

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[1] A: No.

[2] Q: In your opinion, when one of [3]

ordinary skill in the art, prior to the time of [4] the '002 invention, and let me step back.

[5] How are you familiar with what one [6] of ordinary skill, as defined by you, would have [7] known prior to the time of the '002 invention?

[8] A: Well, I was working there at that [9] — in those years, working on the subject, and [10] certainly had a lot of contact with the people [11] that would fit that definition of one of [12] ordinary skill in the art.

[13] Q: And as they were working on [14] active-matrix displays?

[15] A: Yes.

[16] Q: Okay. So in your view, would one [17] of ordinary skill in the art prior to the time [18] of the '002 invention, who had before him the [19] four references you've discussed, the Kawamura, [20] Okawa, Yudasaka and Oritsuke references, need to [21] do any experimentation whatsoever in order to [22] combine an inner ring and an outer ring in one [23] display?

[24] A: No.

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[1] Q: Would it require any inventive [2] contribution on that person's part?

[3] A: No. And in fact, if they — if [4] someone thought it was an invention, I would [5] explain to him that it wasn't.

[6] Q: Did the combination of the inner [7] and outer rings lead to any surprise or [8] unexpected results in your mind?

[9] A: No. That's another point.

[10] Q: Do you understand what the term [11] hindsight means when it's talked about in [12] connection with a validity analysis?

[13] A: Yes.

[14] Q: What does it mean?

[15] A: Well, it means I shouldn't be [16] applying knowledge that I've gained, let's say, [17] in recent years to what might have been going on [18] back then.

[19] Q: And are you doing that in forming [20] your opinion?

[21] A: No, because I was there.

[22] Q: So are you considering only what [23] one of ordinary skill knew prior to the time of [24] the '002 invention?

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[1] A: Yes.

[2] Q: And again, you reviewed [3] Dr. Schlam's deposition?

[4] A: Yes.

[5] Q: And was there anything in that [6] deposition that led you to believe that he [7] agreed with you that the combination of this [8] inner and outer guard ring was obvious?

[9] A: Yes. He did make comments to that [10] effect.

[11] Q: And did you identify the portion [12] of the transcript —

[13] A: Yes.

[14] Q: — that you thought supported that [15] view?

[16] A: Yes, I did, [17] MS. CORBIN: Can we have the slam [18] clip, please? Dr. Schlam's clip?

[19] (Beginning of videotape excerpt:)

[20] Q: So you are aware — do these test [21] results form part of the basis of your opinion [22] that the combination of the inner ring and the [23] outer ring together provide more ESD protection [24] than the inner ring alone?

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[1] A: Not necessarily test results. [2] It's something that's quite obvious in the world [3] of electronics. And again, the best thing I can [4] do is come up with analogies, raincoat and [5] umbrella.

[6] (Conclusion of videotape excerpt.)

[7] BY MS. CORBIN:

[8] Q: Do you recall — what else did [9] Dr. Schlam have to say about the raincoat and [10] the umbrella.

[11] A: I think he explained that analogy [12] earlier that if it's raining and someone offers [13] you two forms of protection, you might take an [14] umbrella. You might use a raincoat.

[15] But if you're really concerned [16] about getting wet, it would be obvious that [17] you'd use both.

[18] Q: And how does that apply to whether [19] it would have been obvious to one of ordinary [20] skill in the art to combine the inner ring and [21] the outer ring in the four references that we've [22] discussed.

[23] A: Well, you can think of the outer [24] ring as the umbrella and the inner as the

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[1] raincoat. They both provide protection in a [2] slightly different way.

[3] That's complimentary. One is [4] during manufacture, one is after manufacture.

[5] The outer ring can be made to [6] provide protection at a lower voltage than would [7] be acceptable for an inner ring. So that's the [8] complimentary aspect.

[9] Q: And in your view, does that fact [10] provide motivation to one of ordinary skill to [11] combine these references?

[12] A: Yes.

[13] Q: Okay. In conclusion, then, Dr. [14] Howard, can you just sum up for us, again, what [15] is your opinion with respect to whether any one [16] of CPT's

products infringe Claims 1 and 8 of the [17] '002 patent?

[18] A: Well, I guess the way to say it is [19] if Claim 1 is stretched to be — cover the — I [20] guess, I don't want to say that.

[21] Q: Let me ask the question. I'm [22] asking you about infringement right now.

[23] A: Yeah, I was getting —

[24] Q: I know we've been going at this a

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[1] long time.

[2] A: Invalidity infringement.

[3] Q: So I'm asking you right now —

[4] A: In terms of invalidity, I think I [5] said it earlier that the — on one hand, you've [6] got the references of Oritsuke and Yudasaka for [7] the inner ring, and the outer ring references of [8] Okawa and Kawamura.

[9] So it's obvious to combine those. [10] And if it's obvious, then it's invalid.

[11] Q: Okay. And with respect to Claim [12] 1, then, what is your view about the obviousness [13] of Claim 1?

[14] A: Well, again, if Claim 1 is [15] determined to cover diodes, then it's not really [16] obvious that it's anticipated by the prior art.

[17] Q: And you do understand that that is [18] LPL's contention that the resistance, the diodes [19] are the resistance?

[20] A: Yes.

[21] Q: So that's validity. [22] Turning, again, to infringement. [23] What is your opinion as to whether any of CPT's [24] products infringe Claims 1 and 8 of the '002

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[1] patent?

[2] A: None of them infringe.

[3] MS. CORBIN: I have no further [4] questions. Thank you, Dr. Howard.

[5] Your Honor, at this time, I'd like [6] to move into evidence Defendants' Exhibit 6, 1, [7] 73, 2, 3, 4, 5, 6, 9, and 38 and 37.

[8] THE COURT: All right. They're [9] admitted subject to later objection.

[10] MS. CORBIN: And also Exhibit 8, [11] Your Honor, sorry, I would like to move that, [12] Exhibit 8 also into evidence.

[13] THE COURT: All right. It will be [14] admitted.

[15] CROSS-EXAMINATION

[16] BY MR. GOODWYN:

[17] Q: Hello, Dr. Howard. [18] I believe you testified at the [19] beginning of your direct examination that you [20] have been retained by Chunghwa; is that correct?

[21] A: CPT, right.

[22] Q: And are you being paid for your [23] testimony today?

[24] A: Yes, I am.

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[1] Q: How much are you being paid?

[2] A: I'm being paid for my time at a [3] rate of \$250 an hour.

[4] Q: How many hours have you worked for [5] Chunghwa or any of the defendants since you have [6] been retained?

[7] A: I would have to estimate, I [8] haven't totaled it up recently, but I have to [9] estimate about 200 hours.

[10] Q: Does that include the time that [11] you spent preparing for trial over these last [12] couple of weeks?

[13] A: Yes.

[14] Q: Now, you spent quite a bit of time [15] this morning discussing both validity and [16] infringement; is that right?

[17] A: Yes.

[18] Q: And you understand that those are [19] two separate analyses; right?

[20] A: I do.

[21] Q: And so let's — to try to avoid [22] confusion, let's just take each of those [23] analyses one at a time and we'll try to step [24] through those and we'll apply the Court's claim

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[1] construction to both of those analyses. Okay?

[2] Let's look at Howard 32. [3] Actually let me try Howard 21, [4] this might speed things through. Howard 21. [5] How about 121. Sorry about that.

[6] Okay. Here we go. Would you [7] agree with me, Dr. Howard, that the three [8] limitations that you argued are not met really [9] boils down to interconnecting and resistance?

[10] A: Well, the interconnecting is [11] appearing in several places, so I don't know if [12] — if you're just saying those interconnecting [13] and resistance themselves, we've also outlined [14] here the interconnecting affects the others, [15] too.

[16] Q: In the element forming an outer [17] electrostatic discharge guard ring, [18] interconnected row and columns refers back up to [19] the step before, interconnecting —

[20] A: That's correct.

[21] Q: And then the last one, [22] interconnections again refers back up to [23] interconnecting?

[24] A: That's correct.

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[1] Q: You got interconnecting and [2] resistance in red, so those are really the



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IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE  
LG PHILIPS LCD CO., LTD., ) Volume 8  
Plaintiff, ) C.A. No. 05-292-JJF  
v. )  
TATUNG COMPANY, TATUNG )  
COMPANY OF AMERICA, INC., )  
CHUNGHWA PICTURE TUBES )  
LTD., and VIEWSONIC )  
CORPORATION, )  
Defendants. )  
Wednesday, July 26, 2006  
9:35 a.m.  
Courtroom 4B  
844 King Street  
Wilmington, Delaware  
BEFORE: THE HONORABLE JOSEPH J. FARNAN, JR.  
United States District Court Judge  
APPEARANCES:  
THE BAYARD FIRM  
BY: RICHARD D. KIRK, ESQ.  
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[1] **THE CLERK:** All rise.  
[2] **THE COURT:** Okay. Good morning. [3] The jury's on its way in.  
[4] (Jury entering the courtroom at [5] 9:37 a.m.)  
[6] **THE COURT:** Okay. Good morning.  
[7] **THE JURY:** Good morning.  
[8] **THE COURT:** You may be seated.  
[9] **MR. RHODES:** Good morning. We'd [10] call as our next witness Jeff Volpe.  
[11] **THE CLERK:** Please state and spell [12] your full name for the record.  
[13] **THE WITNESS:** My name is Jeff [14] Volpe. J-E-F-F V-O-L-P-E.  
[15] **THE CLERK:** Raise your right hand.  
[16] Do you affirm that the testimony you're about to [17] give to the Court and the jury in the case now [18] pending will be the truth, the whole truth and [19] nothing but the truth?  
[20] **THE WITNESS:** I do.  
[21] **THE CLERK:** Be seated.  
[22] **DIRECT EXAMINATION**  
[23] **BY MS. GABLER:**  
[24] **Q:** Good morning, Mr. Volpe.

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[1] **A:** Good morning.  
[2] **Q:** Could you please introduce [3]

yourself to the jury?

[4] **A:** Yes. My name is Jeff Volpe, and I [5] am the vice president of marketing for ViewSonic [6] for the Americas.

[7] **Q:** What are your responsibilities as [8] the vice president of marketing for ViewSonic [9] Americas?

[10] **A:** I handle most of the aspects of [11] marketing for our company. I take care of our [12] public relation, our print advertising, our web [13] development, product marketing, which includes [14] pricing promotions, product road maps. And then [15] some strategy for our futures.

[16] It affords me the opportunity to [17] also be very close to our sales team, customers, [18] and our competition for the Americas region. [19] Additionally, I'm also involved in global [20] planning for the company.

[21] **Q:** Did you have any positions with [22] ViewSonic Americas prior to your current [23] position?

[24] **A:** Yes. I was the vice president of

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[1] sales for the Americas, also.

[2] And then prior to that, I was the [3] general manager for the Canadian operations.

[4] **Q:** Can you please describe for the [5] jury ViewSonic's business?

[6] **A:** ViewSonic is a global brand. We [7] supply display products like TVs, monitors, and [8] projectors, and all the associated accessories [9] to the markets that we deal in around the globe.

[10] **Q:** How long has ViewSonic been in [11] business?

[12] **A:** ViewSonic started its business in [13] 1987 as key-point technologies were [14] redistributed keyboards. We then evolved our [15] business in 1990 and incorporated ViewSonic.

[16] And we've been focused on display [17] technologies ever since.

[18] **Q:** And how long have you personally [19] been with ViewSonic?

[20] **A:** I've been with ViewSonic for [21] almost ten years.

[22] **Q:** Now, you described your position [23] as vice president of marketing and your former [24] position as vice president of sales in relation

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[1] to the Americas region. Can you please describe [2] that region for the jury?

[3] **A:** Yes. The Americas region consists [4] of the United States, of course, Canada, Central [5] America and also the countries in South America.

[6] **Q:** And does ViewSonic sell in [7]

countries other than those included within the [8] Americas region?

[9] **A:** We are a global country or [10] company. We sell to 128 countries. We've [11] broken out our business into four regions: The [12] Americas being one, Europe being another, Asia [13] Pacific being another, which includes Australia, [14] and also ViewSonic China.

[15] **Q:** And over the course of your last [16] ten years with ViewSonic, have you become [17] familiar with ViewSonic Americas sales records?

[18] **A:** Through my career with ViewSonic, [19] I've been very engaged with the sales and [20] marketing aspects and continue to be as we [21] speak.

[22] **Q:** And what, if any, records does [23] ViewSonic Americas keep of its sales [24] transactions with its customers?

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[1] **A:** We keep pretty extensive sales [2] records. We try to make sure we understand our [3] customers and where the business trends are [4] going, we know where we ship product to, who we [5] ship product to, what quantities of products we [6] ship, model numbers, we have to really make sure [7] we understand our business very well, so I'm [8] very up to speed with our sales reports.

[9] **Q:** And as part of your job [10] responsibilities, do you review those records on [11] a periodic basis?

[12] **A:** Part of the marketing job is to [13] make sure we do forecasting and submit what we [14] think we're going to need to buy, so in order [15] for me to do a good job of that I have to [16] understand how much we're selling on an ongoing [17] basis, so I review our sales reports weekly at [18] minimum and many times daily.

[19] **Q:** Brian, if you could put DTX 100 up [20] on the screen.

[21] Mr. Volpe, have you seen this [22] document before?

[23] **A:** Yes, I have.

[24] **Q:** And can you describe it for the

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[1] jury, please?

[2] **A:** This document outlines our LCD [3] monitor shipments starting in 1999 through to [4] 2003. You can see a product model up there that [5] is ViewSonic model numbers, the quantities we [6] have shipped into the U.S. regions.

[7] **Q:** Brian, if you could put all the [8] pages of DTX 100 up on the screen.

[9] And Mr. Volpe, are the other pages [10] of DTX 100, do they contain the same type of [11] information as the first page?

[12] **A:** They do. And these are products [13] that may contain the CPT panels.



[14] Q: And which types of products are [15] these again?

[16] A: These are LCD monitors.

[17] Q: Thanks, Brian. If you could put [18] DTX 101 on the screen now.

[19] Mr. Volpe, have you seen this [20] document before?

[21] A: Yes, I have.

[22] Q: And Brian, if you could go ahead [23] and put all four pages of this document up on [24] the screen.

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[1] Could you please identify this [2] document for the jury?

[3] A: Like 100, this shows ViewSonic [4] products, in this case it is our LCD TV products [5] that have been sold from 2003 through to the end [6] of the first quarter of this year. Again, you [7] can see the model numbers, the revenue and the [8] quantity numbers that have been shipped into the [9] U.S. These are also products that may contain [10] CPT modules.

[11] Q: You said that they may contain CPT [12] modules. Can you explain that, please?

[13] A: Sure. We qualify a number of [14] different products that can be put into our [15] finished goods, and so some of these products [16] would have more than one module type that would [17] be approved to be in these products.

[18] Q: Now, you have indicated that DTX [19] 100 and DTX 101 may contain shipments into the [20] Americas region. Did I hear you accurately?

[21] A: That's correct.

[22] Q: Does every product that is shipped [23] into the Americas region actually get sold in [24] the United States?

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[1] A: We have our main port for the [2] Americas is Long Beach, and all of — almost all [3] of our products come into Long Beach. From [4] there we'll redistribute those products [5] throughout the Americas, so we will ship some of [6] those products into Canada and some of those [7] products into Latin America.

[8] Q: Approximately what percentage of [9] the products that ViewSonic America receives in [10] the Long Beach, California port are actually [11] sold in a country other than the United States?

[12] A: Approximately fifteen percent of [13] our products are sold outside of the United [14] States.

[15] Q: And over what percent — or over [16] what time period would that fifteen percent [17] number apply in terms of sales to countries [18] other than the United States?

[19] A: It's been a pretty consistent [20] number for ViewSonic that fifteen percent of our [21] business comes from countries other than the [22] U.S., so from '99 through and until the present, [23] it's pretty much fifteen percent.

[24] Q: But in DTX 100 and DTX 101,

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[1] ViewSonic has isolated those shipments that went [2] to U.S. addresses as opposed to those that [3] cleared the port in Long Beach, is that correct?

[4] A: That's correct.

[5] Q: I would like to switch topics for [6] a minute. Brian, could you take that down. [7] Thanks.

[8] Does ViewSonic manufacture the [9] products it sells?

[10] A: ViewSonic is not a manufacturer of [11] products. We source products from system [12] integrators. System integrators are companies [13] that are also referred to as OEMs, or original [14] equipment manufacturers. They will be able to [15] go and acquire components based on [16] specifications that either the market is looking [17] for or that ViewSonic specifies.

[18] As a result, they'll go and grab [19] the components, put the products together and [20] then provide ViewSonic with finished goods.

[21] Q: And why is it that ViewSonic has [22] chosen to use third parties to manufacture its [23] products?

[24] A: There's a number of reasons why

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[1] it's good for ViewSonic. Our business model [2] allows us to be very flexible.

[3] It allows us to be very efficient. [4] We don't have to invest in fixed assets for [5] manufacturing purposes.

[6] We also have choices as a result. [7] We have an opportunity to go to a number of [8] different manufacturers of products and [9] components to acquire the best products at the [10] best prices.

[11] I've been very public to my [12] customers that I think they should also be [13] looking for multiple suppliers for their [14] businesses to help them be most successful in [15] the business in dealing with choices for their [16] customers.

[17] Q: Prior to this lawsuit, were you [18] familiar with the company known as LPL?

[19] A: Yes, I am. LPL is a panel module [20] manufacturer, owned and operated by LG [21] Electronics.

[22] Q: And who is LG Electronics?

[23] A: LG Electronics is a company, [24] global company that makes many brands, LG

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[1] Electronics products, of which are display [2] products, that we see in our markets around the [3] world.

[4] Q: And in your experience, does LG [5] Electronics sell in the United States?

[6] A: LG Electronics does sell products [7] in the United States. And as a result, [8] ViewSonic does run into LG on many occasions in [9] the marketplace.

[10] Q: Does ViewSonic compete with LG [11] Electronics in the United States?

[12] A: In our — in our market, I see LG [13] fairly frequently. They are, versus ViewSonic, [14] a display manufacturer.

[15] We've always been a little more [16] successful in the United States than LG [17] Electronics has been.

[18] Q: And in your experience as vice [19] president of sales and then vice president of [20] marketing for ViewSonic over the last four or [21] five years, has there been any change in LGE's [22] market share in the United States?

[23] MR. CHRISTENSON: Your Honor, [24] objection. Lack of relevance.

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[1] THE COURT: I'll overrule the [2] objection. You can answer that.

[3] THE WITNESS: Okay. You know, we [4] found that LG Electronics has not seen the same [5] level of momentum in the U.S. that they have [6] worldwide. They've been trying very hard to [7] compete against many manufacturers, of which [8] ViewSonic would be one.

[9] BY MS. GABLER:

[10] Q: And can you give me any examples [11] that you're personally aware of in terms of [12] efforts LG Electronics has made to grow its [13] market share in the United States over the last [14] several years?

[15] A: It's a very competitive market [16] that we work in in the display space. What I [17] have experienced is a focus by LG to some of [18] ViewSonic's customers.

[19] I was involved in working with a [20] company called Best Buy, and Best Buy was our [21] largest retailer. It represented about \$25 [22] million a quarter for ViewSonic in business.

[23] And in 2004, I had several [24] meetings with Best Buy, and they had indicated

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[1] to us that they were looking at some [2] alternatives. It later became apparent that we [3] were competing against LG, who was offering Best [4] Buy some additional funding.

[5] That funding was pretty [6] significant,

[12] **THE COURT:** All right. Thank you. [13] You may step down.

[14] **MR. RHODES:** We call as our next [15] witness Oliver Shih.

[16] **THE CLERK:** Please state and spell [17] your full name for the record.

[18] **THE WITNESS:** Oliver Shih.

[19] **THE CLERK:** Could you spell it, [20] please?

[21] **THE WITNESS:** O-L-I-V-E-R S-H-I-H.

[22] **THE CLERK:** Please raise your [23] right hand. Do you affirm that the testimony [24] you are about to give to the Court and the jury

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[1] in the case now pending will be the truth, the [2] whole truth and nothing but the truth?

[3] **THE WITNESS:** Yes.

[4] **THE CLERK:** Have a seat.

[5] **BY MR. YOVITS:**

[6] **Q:** Good morning, Mr. Shih. Thank you [7] for being with us.

[8] Would you please introduce [9] yourself to the jury?

[10] **A:** Good morning. My name is Oliver [11] Shih.

[12] **Q:** And who do you work for, Mr. Shih?

[13] **A:** I work for Tatung Company now.

[14] **Q:** How old are you?

[15] **A:** I'm 40.

[16] **Q:** And do you have a family?

[17] **A:** Yes.

[18] **Q:** Do you have children?

[19] **A:** I have two kids. One boy and one [20] girl.

[21] **Q:** And how old are they?

[22] **A:** The boy is at age of 11. And the [23] little girl is at age of nine.

[24] **Q:** You speak English well. Where did

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[1] you learn to speak English?

[2] **A:** I learned to speak English at a [3] school in Taiwan. And I also went to Washington [4] University in St. Louis for my M.B.A. studying [5] around 18 years ago.

[6] **Q:** Now, before you came to St. Louis [7] to get your MBA, where did you go to college, [8] undergraduate college?

[9] **A:** I went to Tatung Institute of [10] Technology in Taiwan.

[11] **Q:** And what's Tatung Institute of [12] Technology called today?

[13] **A:** It's called Tatung University.

[14] **Q:** Does Tatung University have [15] engineering and science degree programs?

[16] **A:** Yes, they have.

[17] **Q:** And do they have engineering and [18] science research going on there?

[19] **A:** As I understand, there is [20] semi-conductor lab and the chemists.

[21] **Q:** Now, when did you start working [22] for Tatung?

[23] **A:** I start to work for Tatung around [24] 16 years ago.

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[1] **Q:** And what's your job there now?

[2] **A:** I work as senior sales director [3] for LCD TV sales.

[4] **Q:** And as a sales director, what are [5] your responsibilities?

[6] **A:** I mainly I work as the [7] communication windows between our net in the [8] office and all the headquarter divisions. And [9] our factory in Czech Republic. And I also cover [10] some of the sales activities in other countries.

[11] **Q:** Now, have you had responsibility [12] at all for U.S. sales account?

[13] **A:** Yes, I used to be the sales [14] account for Nokeia Display and View-Sonic in [15] United States.

[16] **Q:** Now, Mr. Shih, as part of your job [17] do you review Tatung's financial and sales [18] information?

[19] **A:** Yes, as a senior sales manager I [20] went through the annual report and also we have [21] monthly review meeting.

[22] **Q:** Okay. Let's talk for a minute [23] about what Tatung does. And let's start with [24] having you tell us just generally, what does

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[1] Tatung do?

[2] **A:** Generally we make LCD related [3] products, PC related products, and heavy [4] industry products such as power generators.

[5] **Q:** You mentioned LCD products. What [6] kind of LCD products does Tatung make?

[7] **A:** We make LCD monitors and LCD TVs.

[8] **Q:** And does Tatung make these [9] monitors and TVs and sell them under its own [10] Tatung brand name?

[11] **A:** Yes, but we very small portion of [12] that.

[13] **Q:** If that's a small portion of the [14] business, what's the larger portion of the [15] business?

[16] **A:** The major portion of our business [17] is making our products with the customer's name [18] on it or customers to sell through their own [19] channels.

[20] **Q:** Well, what percentage of Tatung's [21] business is making products for other companies [22] to put their own brand

names on them and sell [23] them as their own?

[24] **A:** It would be more than ninety

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[1] percent.

[2] **Q:** All right. Let's shift gears a [3] little bit and I would like to ask you about [4] panel suppliers now. And let's begin by having [5] you tell us, what are the main components of an [6] LCD monitor?

[7] **A:** The major components of an LCD [8] monitor would be the panel itself, scatter chip, [9] main board and power adaptor.

[10] **Q:** So where does Tatung get the LCD [11] panels for its monitors?

[12] **A:** We just bought them from our [13] suppliers.

[14] **Q:** And who are the main suppliers for [15] Tatung's LCD monitors for the panels?

[16] **A:** We have CMO and CPT.

[17] **Q:** And CPT, it's the same CPT that's [18] in this lawsuit?

[19] **A:** Yes, it is.

[20] **Q:** All right. So that's LCD [21] monitors. Let's talk now about LCD TVs. What [22] are the main components of an LCD TV?

[23] **A:** The main components of an LCD TV [24] would be the panel, scatter chip, main board,

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[1] power board and tuner.

[2] **Q:** And who are the main panel [3] suppliers for Tatung LCD TVs?

[4] **A:** The main supplier would be CMO and [5] CPT, and we also buy panels from LPL and AUO.

[6] **Q:** So LPL is a supplier and that's [7] the same LPL that sued Tatung in this lawsuit?

[8] **A:** Yes, it is.

[9] **Q:** Now, speaking about Tatung's LCD [10] products in general, does Tatung have products [11] for which there is more than one panel supplier?

[12] **A:** Yes, we prefer to do that.

[13] **Q:** And why does Tatung prefer to have [14] more than one panel supplier for particular [15] products?

[16] **A:** So by doing so, we maintain our [17] bargaining power between different suppliers in [18] terms of pricing and at the same time if there [19] is something wrong happen to one specific [20] supplier, then we could switch to the other one [21] and keep our production running.

[22] **Q:** Does Tatung have any products for [23] which CPT is the only panel supplier?



[24] A: No.

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[1] Q: All right. So when Tatung has its [2] preference and there is multiple panel suppliers [3] for particular products, do the panels from each [4] supplier have to be interchangeable?

[5] A: Yes.

[6] Q: All right. I would like to ask [7] you now about Tatung's relationship with CPT. [8] And to start with, just generally, how is Tatung [9] related to CPT, if at all?

[10] A: We hold less than thirty percent [11] share of CPT and CPT is one of our panel [12] suppliers.

[13] Q: So as a thirty percent [14] shareholder, does that mean that Tatung controls [15] CPT?

[16] A: No, we have no control over CPT's [17] operation.

[18] Q: Does Tatung get better prices from [19] CPT than other companies do?

[20] A: No, I don't think so.

[21] Q: Is Tatung CPT's biggest customer?

[22] A: No, I understand they have bigger [23] customers, much, much bigger than Tatung.

[24] Q: How do you know that CPT has much

Page 1790

[1] bigger customers than Tatung?

[2] A: Comparing the quantities we [3] purchase from them and the quantities from the [4] market information, we notice that.

[5] Q: So what is the business [6] relationship, then, between CPT and Tatung?

[7] A: We just buy panels from them.

[8] Q: Does Tatung interact with CPT in [9] the same way that it would interact with any [10] other panel supplier?

[11] A: Yes. And the only difference [12] would be that CPT's sales manager may visit [13] Tatung more often in order to increase the sales [14] amount.

[15] Q: Do Tatung and CPT collaborate in [16] any way to try to increase business?

[17] A: No.

[18] Q: Why not?

[19] A: Because we don't want our customer [20] to have direct link with our suppliers, and we [21] worry if we allow them to do that, then our [22] supply may tell the price we quote to our [23] customers, then it will become more difficult [24] for us to have price, such as panel price.

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[1] Q: Does Tatung report back to CPT on [2] where CPT panels are going to go after

Tatung [3] buys them and then puts them into finished [4] products?

[5] A: No, we would not do that.

[6] Q: And finally, Mr. Shih, I would [7] like to ask you just a couple of questions about [8] Tatung America. And first just generally I [9] would like to ask, what is the relationship [10] between Tatung and Tatung America, if there is [11] one?

[12] A: We have share in Tatung America, [13] and Tatung America is also one of our customers.

[14] Q: Now, does Tatung Company control [15] Tatung America?

[16] A: No, we have no control over the [17] operation, either.

[18] Q: Does Tatung America have other LCD [19] suppliers besides Tatung?

[20] A: I believe so. But we have no idea [21] who they are.

[22] MR. YOVITS: I have no further [23] questions.

[24] CROSS-EXAMINATION

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[1] BY MR. CHRISTENSON:

[2] Q: Mr. Shih, you needed an [3] interpreter at your deposition when I depose [4] you, right?

[5] A: Yes.

[6] Q: And the United States is an [7] important part of Tatung's global network, isn't [8] it?

[9] A: Well, I would say United States is [10] an important part for the whole world.

[11] Q: Please pull up Plaintiff's Exhibit [12] 106 at page 18, TD 87.

[13] And Tatung has locations in [14] Beaverton, San Jose, L.A., San Diego and El Paso [15] in the U.S., correct?

[16] A: Yes.

[17] MR. CHRISTENSON: No further [18] questions, Your Honor.

[19] THE COURT: All right.

[20] MR. YOVITS: No redirect, Your [21] Honor.

[22] THE COURT: All right. Thank you.

[23] MR. RHODES: And, Your Honor, we [24] call as our next witness Mike Lee.

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[1] THE CLERK: Please state and spell [2] your full name for the record.

[3] THE WITNESS: Mike P. Lee. [4] M-I-K-E, L-E-E.

[6] MIKE LEE, [7] the deponent herein, having first [8] been duly sworn on oath, was [9] examined and testified as follows:

[10] DIRECT EXAMINATION

[11] BY MR. YOVITS:

[12] Q: Good morning, Mr. Lee. I'm glad [13] you could with be with us.

[14] Would you please introduce [15] yourself to the jury?

[16] A: My name is Mike Lee. I work for [17] Tatung America.

[18] Q: Where do you live, Mr. Lee?

[19] A: Long Beach, California.

[20] Q: How long have you lived in [21] California?

[22] A: Twenty-five years.

[23] Q: I would like to begin by asking [24] you a little bit about your educational and

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[1] professional background, so to begin with, where [2] did you go to college?

[3] A: I went to Tatung University in [4] Taiwan to get my electrical engineering, [5] bachelor degree. I also went to college in [6] California to get my engineering master degree.

[7] Q: When did you start working for [8] Tatung America?

[9] A: 1985.

[10] Q: What's your present job at Tatung [11] America?

[12] A: Vice-president in charge of [13] engineering and production.

[14] Q: And as vice-president, what are [15] your responsibilities?

[16] A: I supervise small production [17] facility in Long Beach, an engineering team. [18] Also, I source and purchase product from [19] overseas and support a sales team.

[20] Q: And do you have people reporting [21] to you?

[22] A: Yes.

[23] Q: How many?

[24] A: Sixty-five.

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[1] Q: And have you had any other jobs at [2] Tatung America?

[3] A: Before this job, I was the [4] department head in charge of our computer and PC [5] monitor sales.

[6] Q: Okay. Let's spend a minute [7] talking about Tatung's — Tatung America's [8] business in general. So to begin with, can you [9] tell us generally what does Tatung America do?

[10] A: We do production for certain [11] products overseas and in the U.S. market. We [12] also purchase and import most of the products we [13] sell, and while we are in manufacturing [14] practice, and sell it into the U.S. market as [15] well.

[16] Q: Okay. So there are some products [17] that the Tatung America makes. Where are those [18] made?

[19] A: China and Taiwan.



[20] Q: And then did you say that most of [21] the products then are imported without playing a [22] role in the manufacturing process?

[23] A: Yes.

[24] Q: Let's first talk about the

Page 1796

[1] products that Tatung America actually makes. [2] Are there any LCD display products that are made [3] by Tatung America in California?

[4] A: Yes.

[5] Q: What are they?

[6] A: POS, point of sale terminal, and [7] game video.

[8] Q: Now, do both game video products [9] and point of sale terminals have LCD panels in [10] them?

[11] A: Yes.

[12] Q: All right. Who are the LCD panel [13] suppliers for Tatung America's game video [14] products?

[15] A: LPL, CMO and CPT.

[16] Q: And what percentage would you say [17] come from LPL?

[18] A: About 70 percent.

[19] Q: All right. And who are the LCD [20] panel suppliers for Tatung America's point of [21] sale terminals?

[22] A: CMO — or CPT only.

[23] Q: So they all come from CPT?

[24] A: Yes.

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[1] Q: Now, let me shift over and ask you [2] about the products that Tatung America buys and [3] sells, imports without being a part of the [4] manufacturing process. Are there any LCD [5] products in that category?

[6] A: Yes.

[7] Q: What are they?

[8] A: PC monitor, security monitor, and [9] LCD TV.

[10] Q: Now, do all of these products, the [11] LCD TVs, computer monitors and security monitors [12] have LCD panels in them?

[13] A: Yes.

[14] Q: All right. Let's look at each one [15] of those.

[16] For suppliers, who are the LCD [17] panel suppliers for Tatung America's LCD TVs?

[18] A: LPL and CMO.

[19] Q: And how about computer monitors, [20] who are the LCD panel suppliers for Tatung [21] America's computer monitors?

[22] A: CMO and CPT.

[23] Q: And finally, security monitors, [24]

who are the LCD panel suppliers for Tatung

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[1] America's security monitors?

[2] A: CMO, and CPT.

[3] Q: All right. Let's talk about [4] Tatung America's relationship with CPT. And, [5] first, let me ask: Does Tatung America have any [6] relationship with CPT?

[7] A: Yes. CPT is one of our panel [8] suppliers.

[9] Q: And does Tatung America have [10] meetings with CPT?

[11] A: Yes, from time to time.

[12] Q: Does Tatung America also meet with [13] other panel makers besides CPT?

[14] A: Yes.

[15] Q: Are the meetings with CPT more [16] frequent than they are with any other panel [17] supplier?

[18] A: No. We have more frequent [19] meetings with LPL.

[20] Q: More frequent meetings with LPL [21] then with CPT?

[22] A: Yes.

[23] Q: Does Tatung America get better [24] prices on CPT panels than other companies do?

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[1] A: No. No. [2] We purchase very small quantity [3] from CPT.

[4] Q: Okay.

[5] A: Like .1 percent.

[6] Q: Now, how do you know that Tatung [7] America only purchases about .1 percent of the [8] panels that CPT makes?

[9] A: Because CPT tells Taiwan industry [10] news.

[11] Q: Okay. All right. [12] Does Tatung America ever arrange [13] meetings between its customers and CPT?

[14] A: Never.

[15] Q: Why not?

[16] A: Some of CPT's customers is our [17] competitors.

[18] Q: Did Tatung America report back to [19] CPT on which customers are getting Tatung [20] America products?

[21] A: No.

[22] Q: Well, does Tatung America tell any [23] panel supplier where its finished products are [24] going?

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[1] A: Yes, we provide customer [2] information to LPL per their request.

[3] Q: You said LPL asks you for [4] information. What information does LPL ask you [5] for?

[6] A: Customer name, quantity and [7] application.

[8] Q: So, does Tatung America actually [9] give LPL information about the customer names, [10] and what application its products are going [11] into, and the quantities that are being [12] purchased?

[13] A: Yes.

[14] Q: So, now let's talk about Tatung [15] America's relationship with Tatung Company. And [16] generally, what is the relationship between [17] Tatung Company and Tatung America?

[18] A: Tatung America is one of Tatung [19] Company's subsidiaries. Tatung Company own [20] 50-percent share of Tatung America.

[21] Q: All right. So as a shareholder in [22] Tatung America, as a subsidiary, does that mean [23] Tatung Company controls Tatung America?

[24] A: No. Tatung America is financially

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[1] independent.

[2] Q: What percentage of the LCD [3] products that Tatung America buys actually come [4] from Tatung Company?

[5] A: About 50 percent.

[6] Q: Does Tatung America have meetings [7] with Tatung Company?

[8] A: Yes.

[9] Q: What's generally discussed at [10] those meetings?

[11] A: Product pricing, product market [12] trends, as well as product road map.

[13] Q: Does Tatung America have meetings [14] with other suppliers besides Tatung Company?

[15] A: Yes.

[16] Q: And what's discussed at those [17] meetings?

[18] A: The same information: Product [19] price, product market trends, and product road [20] map.

[21] Q: Okay. Finally, I just want to ask [22] you a couple questions about ViewSonic.

[23] Is there any relationship between [24] Tatung America and ViewSonic?

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[1] A: No. We see ViewSonic as one of [2] our competitors.

[3] Q: So if they're competitors, does [4] Tatung America have any interaction with [5] ViewSonic at all?

[6] A: No.

[7] MR. YOVITS: Okay. Thank you. [8] I have no further questions.

[9] THE COURT: Okay.

[10] CROSS-EXAMINATION

[11] BY MR. CHRISTENSON:

cost savings [22] are from the '002 patent.

[23] A: At least as of yet, he hasn't.

[24] Q: And those were the only two people

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[1] Mr. Cobb indicated he said he had relied on in [2] putting together his damage model, and his [3] report, and for his deposition; corrects?

[4] A: At that stage, that was the only [5] basis for his estimate of the cost savings.

[6] Q: All right. [7] Right. That's what you heard him [8] testify to on Friday, right?

[9] A: Yes, that was one of the things he [10] testified to.

[11] Q: Now, in your opinion, has Mr. Cobb [12] relied on the type of information that a damage [13] expert customarily relies upon to determine the [14] amount of cost savings attributable to, in this [15] instance the '002 patent?

[16] A: No.

[17] Q: Why not?

[18] A: Well, as a damage expert, I often [19] rely on information that isn't evidence, that is [20] not actually produced in Court to use as an [21] assumption or a fact in calculating my damages.

[22] But the normal types of [23] information that fit that category for someone [24] like me, who's a CPA, are written business

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[1] records of the companies involved that weren't [2] prepared in anticipation of litigation, that are [3] just normal business records of the companies.

[4] Those are the types of things that [5] I normally rely upon. I do not rely upon the [6] oral representations of my client.

[7] They may ask me to assume those [8] things are true, but I tell my client, that You [9] must prove those things. I can't do that for [10] you as a CPA. I can't independently vouch for [11] that number or testify to that that is a proper [12] basis for the damage claim.

[13] And so in that situation, I would [14] ask my client to come in and give proper [15] evidence as to that key assumption. Otherwise, [16] my damage claim is useless to the jury.

[17] Q: Now, you mentioned that part of [18] the reason that you would not have relied on the [19] type of information Mr. Cobb relied on here is [20] because that you're a CPA, and that's [21] inconsistent with your practice as a CPA; is [22] that correct?

[23] A: It is inconsistent with my [24] practice and the standards of my profession.

[1] Our job is to attest to the accuracy of other [2] information.

[3] But to do that, we have to do a [4] lot of detailed testing and analysis, and we [5] don't rely upon what our clients tell us. We [6] have to do a lot of other work to corroborate [7] that information before we will say that is [8] reliable information.

[9] Q: Mr. Cobb is a CPA, too, isn't he?

[10] A: He is.

[11] Q: Now, have you seen any evidence [12] that the '002 patent, as opposed to the use of [13] guard rings, in general, through other, what's [14] been called prior art references, increase the [15] production yield or result in cost savings?

[16] A: I've seen no information as to the [17] amount that that increase would be.

[18] Q: For the '002 patent as opposed to [19] other guard ring technology; is that correct?

[20] A: Other guard ring technology or [21] other environmental factors that would reduce [22] electrostatic discharge.

[23] Q: And those would include things [24] that other witnesses have mentioned already like

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[1] ion showers, and the clean room clothing, and [2] air filter systems, things like that?

[3] A: Yes. It increased humidity, [4] anti-static bracelets, all the other types of [5] things that are there to actually make [6] electrostatic discharge not even occur at all.

[7] So you wouldn't even need to have [8] something that would release it, because it's [9] never going to occur.

[10] Q: Right. And you're not testifying [11] that those other methods of controlling [12] electrostatic discharge are a hundred-percent [13] foolproof, are you?

[14] A: I don't have any information about [15] what causes reduced electrostatic discharge. I [16] have not seen any evidence on that in this case [17] for any particular factor.

[18] Q: If you had been hired by LPL in [19] this case, what information would you have asked [20] LPL to present at trial in order to support your [21] damage model?

[22] A: Well, actually I think it would be [23] the same thing that Mr. Cobb asked for. He [24] actually asked for this information and was told

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[1] that it just didn't exist, so I would have done [2] the same thing he did, but then

when I found it [3] didn't exist, I would say we have a problem and [4] then try to figure out how we would resolve it [5] by saying let's do a scientific test at least in [6] the laboratory to figure out what the potential [7] yield increase might be.

[8] Q: So in this case, what steps did [9] you take to determine the reasonable royalty [10] rate?

[11] A: Well, I had no information to [12] really know what the rate increase was, but I [13] have to come up with a number, so I used [14] basically the cost savings that Mr. Cobb had [15] introduced in his actual report as my starting [16] point. But then I used what's called the 25 [17] percent rule to develop the starting point for [18] the analysis at the hypothetical negotiation.

[19] Q: Can you explain the 25 percent [20] rule?

[21] A: Yes. It's a rule of thumb in the [22] licensing industry that everything else being [23] equal, not really understanding all the [24] intricacies of the unique factors of this

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[1] situation, that in normal negotiation the reason [2] why you pay a royalty or license for a patent is [3] it's going to increase your profits and that [4] could be because you're going to have better [5] features, it's going to increase your price, or [6] maybe you reduce your costs like here.

[7] So anyway, you look at that cost [8] savings and that price increase and whatever it [9] is, you say that 25 percent of that will be paid [10] by the licensee to the patent owner, and the [11] licensee will keep the other 75 percent because [12] they're bearing all the risks of manufacturing [13] and marketing and trying to sell the product, so [14] that's a fair split of this incremental profit [15] that's generated by the invention.

[16] Q: Now, is 25 percent a hard and fast [17] number?

[18] A: No. And some people call it the [19] 15 to 35 percent rule, but it is not a hard [20] number, where you end up I think is the right [21] place to start the negotiation.

[22] Q: Do you use the 25 percent rule in [23] all of your work?

[24] A: I wouldn't say I use it in all of

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[1] my work, but most of the time where I'm [2] calculating damages either for the patent owner [3] or the alleged infringer, that's where I start my [4] hypothetical negotiation.

[5] Q: Now, what range of cost savings [6] did Mr. Cobb indicate that he was relying on in [7] his June 2nd expert report?



[8] A: Well, he didn't have a single [9] number. At that point he had a range, he had [10] either three percent or five percent, and he [11] made various calculations based on those two [12] numbers.

[13] Q: When he testified to the jury here [14] last week, what percentage of cost savings did [15] Mr. Cobb present as his final damage number?

[16] A: At that point at trial he only [17] presented numbers based on the 5 percent, [18] although orally he did talk then about some 33 [19] percent savings of that, but he only used one [20] number and that's a 5 percent cost savings.

[21] Q: Okay. Now, on your slide up here, [22] you talk about 3 to 5 percent of cost of goods [23] sold. Can you explain what cost of goods sold [24] is to the jury?

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[1] A: Yes. Cost of goods sold is the [2] actual cost of the product that's being made and [3] sold. So you know that a company earns a [4] certain amount of revenue when they sell a [5] product and then they have costs to sell that [6] product, and usually the biggest cost is the [7] actual cost of making that product.

[8] So here we have an LCD panel [9] that's being sold, and the cost of goods sold [10] would be all the costs of all the pieces of [11] material in that product, all the [12] semiconductors, all the glass, all the metal, [13] everything that's — all the circuits, [14] everything that goes into that product is the [15] material cost.

[16] You then have labor that's [17] involved in making that product. There is [18] people that actually help assemble these [19] products. And then there is all the cost of the [20] equipment and the factories that have to be [21] allocated to these various products. It's those [22] costs that we talk about as cost of goods sold. [23] It's not the cost of then selling it and [24] marketing it and the administrative people that

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[1] are all necessary, but it's only the cost of the [2] product.

[3] Q: And in this case, did you make an [4] assumption as to the starting point of the [5] percentage of cost of goods sold that you were [6] going to attribute for the sake of argument to [7] the '002 patent?

[8] A: Yes, I thought a reasonable place [9] to start with this unsupported 3 to 5 percent [10] would be the midrange of that, so at that point [11] when I did my analysis, and my report is dated [12] June 16th, I used the midpoint of that range, or [13] I assumed that the cost savings would be 4 [14] percent of the cost of goods sold.

[15] Q: Mr. Wagner, can you explain how

[16] you used CPT's cost — or how you calculated [17] CPT's cost of goods sold?

[18] A: Yes I had financial information [19] from CPT for the TFT LCD Division from 1999 [20] through 2005. So I had all those years of [21] information as to what it cost them to make [22] their LCD products. And on average during that [23] time period that the cost of goods sold was 89 [24] percent of sales, which means for every dollar

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[1] of sales revenue they earned for selling these [2] products, they incurred 89 cents of cost for [3] each one of these products.

[4] Q: Now, is this the same calculation [5] Mr. Cobb made for cost of goods sold?

[6] A: Yes, we agree on this calculation.

[7] Q: And then what did you do next?

[8] A: Well, the next thing I did was [9] then I had to figure out what is going to be my [10] starting royalty rate that has to be a [11] percentage of sales. Remember my royalty base [12] that I think is appropriate and is typical is [13] the sale of the product, not the cost of the [14] product. So I then had to convert all of this [15] information I have been talking about to a [16] percentage of sales.

[17] And what I did was the cost [18] savings of 4 percent, which is in the middle [19] there, is of 89 percent of the sales. So I had [20] to multiply the 4 percent times 89 percent to [21] get the actual percent of sales that is really [22] the value or the relationship to sales of this [23] cost improvement.

[24] I then multiplied that by 25

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[1] percent, again, my starting point that the [2] licensee will pay 25 percent of this cost [3] savings to LPL in this case to come up with what [4] I think is the starting point, and if you do [5] that math, my starting point is everything else [6] being equal, that the royalty rate should be 0.9 [7] percent of sales or slightly less than one [8] percent of sales.

[9] Q: And then again this is going to be [10] your starting point for the hypothetical [11] negotiation between the parties; is that [12] correct?

[13] A: That is correct.

[14] Q: What was the next step of your [15] analysis?

[16] A: The next step of my analysis is [17] now I have got to go into this hypothetical [18] negotiation and I used the Georgia-Pacific [19] factors to figure out how this negotiation would [20] evolve and what the final number would be for my [21] starting point.

[22] Q: Can you explain to the jury what

[23] the Georgia-Pacific factors are?

[24] A: Well, I'm not going to go through

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[1] each one of these now because I go through them [2] each in how I apply them in this case. These [3] are the 15 factors and you may see that the 15th [4] of the factors is the hypothetical negotiation.

[5] So what you do is you use all the [6] other 14 factors, how they affect the royalty [7] rate and then you use that information to [8] synthesize it and come up to a judgment as to [9] what the end result would be.

[10] Q: And what's the origin of these [11] factors?

[12] A: The origin of these factors is a [13] case that was called the Georgia-Pacific case. [14] It was a federal judge who made a decision in [15] the damage area and he listed these 15 factors. [16] And it's become really the holy grail for damage [17] experts since then. Almost every damage expert [18] I know uses this analysis, this framework to [19] inform their judgment as to what the appropriate [20] rate should be.

[21] Q: And do you use a Georgia-Pacific [22] style analysis when you prepare damage models on [23] behalf of plaintiffs?

[24] A: In any patent case I work in, I

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[1] base my analysis on reasonable royalties on the [2] Georgia-Pacific factors.

[3] Q: Mr. Wagner, could you explain this [4] slide to the jury?

[5] A: Yes. This is just a graphical [6] depiction of where I'm starting. My starting [7] point again is 0.9 percent of sales. I'm going [8] to go through each of these Georgia-Pacific [9] factors and see if they would tend to raise this [10] point up from that as the final point in the [11] negotiation or it's going to lower it down. [12] That is the construct that I'm going to use to [13] come up with the final rate.

[14] Q: Let's start with the first factor. [15] Can you explain the first factor to the jury?

[16] A: Yes. The first factor is really [17] looking at has the licensor here, LPL, the [18] patent owner actually licensed the '002 patent [19] in the real world? And does that give me [20] information as to what is the value of this [21] patent when it's licensed to other entities. [22] And so that is the construct that you look at.

[23] And if it's done enough, you may [24] even have what's called an established royalty



[17] MS. GABLER: Brian, if we could [18] have slide Number 3 from Mr. Cobb's [19] presentation.

[20] BY MS. GABLER:

[21] Q: Okay. And you were, again, in the [22] courtroom during Mr. Cobb's testimony; correct?

[23] A: I was.

[24] Q: Okay. Now, if you were going to

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[1] calculate a running royalty rate based on Mr. [2] Cobb's analysis, how would you go about doing [3] that?

[4] A: Well, the bottom figure on the [5] lower right-hand side of this schedule is the [6] royalty that he believes should be paid for the [7] use of Claims 1 and Claim 8 of the '002 patent. [8] So he says that \$52,447,000 should be paid [9] during this period of time from March of 2002 [10] through June of 2006.

[11] He also calculated on the far [12] right, which is highlighted in yellow near the [13] top of the schedule the total U.S. net sales of [14] accused products. So to determine the running [15] royalty rate that he's actually asking for, you [16] would divide the 50-percent savings, which is [17] the royalty he says is appropriate by the sales.

[18] Q: And in Mr. Cobb's slide, [19] highlighted at the top, that's in thousands of [20] U.S. dollars, right? So you need to add three [21] zeros on each of his numbers?

[22] A: You do. So sales are about 2.35 [23] billion and the royalty payment is 52 million.

[24] MS. GABLER: If we can have the

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[1] next slide, please, Brian.

[2] BY MS. GABLER:

[3] Q: So using those numbers from Mr. [4] Cobb's analysis, what running royalty rate is [5] Mr. Cobb asking this jury to award LPL for CPT's [6] use of a single patent, the '002 patent?

[7] A: His royalty amount works out to be [8] 2.2 percent of sales. So for every sale of [9] accused product, every dollar sale that CPT [10] gets, they should pay 2.2 cents or 2.2 percent [11] to LPL, based on his opinion.

[12] Q: And do you have any opinion on the [13] reasonableness of this rate?

[14] A: I believe it's unreasonable.

[15] Q: Why is that?

[16] A: Well, it's because you go back to [17] the 2.5 percent, which is this entire bar is the [18] rate that LPL was asking for. And remember when [19] you start asking in a license negotiation, it's [20] not normally or always where you end up at [21] sometimes something lower than

that. That's [22] just your starting point, again.

[23] And licensors normally ask for [24] higher than they're going to end up accepting.

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[1] But they are saying, we'll license our entire [2] 466 patent portfolio for two and a half percent.

[3] And if Mr. Cobb's opinion is [4] correct, then 2.2 percent of that 2.5 percent is [5] just for this one patent. And that means the [6] 466 other LCD patents that LPL has for LCD [7] technology is only worth, in total 0.3 percent. [8] And I don't find that to be reasonable.

[9] Q: Is, in essence, for — in order [10] for Mr. Cobb's royalty rate to be [11] reasonable, the entire remainder of LPL's LCD [12] patent portfolio would essentially have to be [13] almost worthless, wouldn't it?

[14] MS. BRZEZYNSKI: Objection; [15] leading.

[16] THE COURT: All right. Objection [17] sustained.

[18] BY MS. GABLER:

[19] Q: Mr. Wagner, did you reach any [20] conclusions as to the impact of Mr. Cobb's 2.2 [21] percent royalty for just the '002 patent on the [22] relative value LPL places on the remaining 466 [23] patents in its LCD portfolio?

[24] A: Yes.

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[1] Q: What conclusion is that?

[2] A: That, basically, the rest of the [3] patents aren't worth it. I wouldn't even pay [4] the filing fees if that's all these — the rest [5] of these patents are worth.

[6] And that doesn't make sense to me. [7] I believe it is probable that LPL does have [8] other valuable patents among those 466. Not all [9] of them may be worth as much as the '002 patent, [10] but clearly the other patents have significant [11] value, or they would not have patented them in [12] the first place.

[13] Q: In addition to the relative rate [14] that LPL is seeking here of 2.2 percent for just [15] the '002 patent in relation to the value of the [16] remainder of its LCD portfolio, are there any [17] other reasons that you believe that Mr. Cobb's [18] reasonable royalty rate of 2.2 percent is not [19] reasonable?

[20] A: Yes.

[21] Q: And what are those reasons?

[22] A: The other reason is that this is a [23] very competitive industry. Mr. Cobb said that. [24] I agree with him.

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[1] This is really a cut-throat [2] industry.

You're not going to have long term, [3] high-sustained profits in this industry. There [4] is intense price competition in this industry.

[5] There's now oversupply of LCD [6] panels. This second Christmas that people had [7] forecasted for 2006, which was the world cup, [8] didn't pan out. So there wasn't this boom in [9] sales of LCD TVs that people thought there was [10] going to be.

[11] So there's a lot of products out [12] there now and prices are plummeting for these [13] products. That's going to have an impact on [14] people in this industry.

[15] And so the analysts are [16] forecasting CPT to have actually a loss of six [17] percent at an operating profit level for this [18] year. And that's probable.

[19] And so you cannot afford to pay [20] high royalties in an industry where you have [21] very thin margins. And so I don't think that [22] this company, CPT, could sustain having to pay [23] 2.2 percent of their sales and stay competitive [24] when they're the only company in this industry

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[1] that's going to have this cost.

[2] You know, I have heard testimony [3] that LPL believes everyone practices their [4] invention here. So everyone in the industry [5] gets this yield improvement, and yet this is the [6] only company that's going to be bearing this [7] cost.

[8] If those are the facts, a 2.2 [9] percent royalty would drive this company out of [10] business in the long term.

[11] Q: Let's take a look at [12] Georgia-Pacific factor number two.

[13] Mr. Wagner, can you explain this [14] factor to the jury?

[15] A: The second factor is kind of the [16] reverse of the first factor. The second factor [17] looks at the behavior of the licensee, here the [18] alleged infringer, CPT. And you look at: What [19] do they normally pay for technology in this [20] industry?

[21] You know, when they need LCD [22] technology patents, what do they normally pay [23] others for that, the right or permission to use [24] their intellectual property?

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[1] Q: And what analysis did you conduct [2] of the facts in this case as they relate to [3] factor number two?

[4] A: Well, your firm produced to me 14 [5] license agreements or amendments to license [6] agreements where CPT was licensing, in other [7] companies, LCD patents to determine what they [8] norm-

ally pay. And based on my review of those [9] agreements, the range of running royalty rates [10] they paid for portfolios of patents were between [11] 0.252 percent and about three percent at the [12] high end.

[13] Q: Let's talk about portfolios of [14] patents. What's a portfolio?

[15] A: Portfolio is a group of patents. [16] It's not licensing just one patent.

[17] None of these agreements was CPT [18] just licensing one patent from someone else. [19] They're licensing all the patents that that [20] particular patent owner had that applied to this [21] particular industry or the LCD field of use.

[22] So these are many patents that are [23] being licensed for these rates, not just one.

[24] Q: So the range of rates you have

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[1] there on your slide of 0.252 percent up through [2] three percent, each and everyone of those rates [3] is for a license agreement to license more than [4] one patent; is that correct?

[5] A: That is correct.

[6] Q: And what, if anything, is the [7] impact of your analysis of factor number two on [8] your starting point of 0.9-percent royalty?

[9] A: In this factor I'm going to [10] decrease from my starting point, because I know [11] based on these rates for licensing many patents, [12] that if you only license one, it would be [13] significantly less than one percent that you [14] would pay.

[15] MS. GABLER: Okay. Brian, if we [16] could have the next slide.

[18] BY MS. GABLER:

[19] Q: Mr. Wagner, can you please discuss [20] factor number three with the jury?

[21] A: Yes, it's called the nature and [22] scope of the license. Different licenses have [23] different terms.

[24] And in the hypothetical

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[1] negotiation, the terms that are going to be [2] offered in that negotiation, it's what's called [3] a naked nonexclusive license. It's nonexclusive [4] because LPL can also license to anyone else they [5] want. It's only they're giving a right to CPT [6] for them to use it, but not exclusively.

[7] And the other thing that happens [8] in this type of negotiation is they're not going [9] to help CPT at all understand the patent, to how [10] to use it in their facilities. So that's why [11] it's called a naked license.

[12] No other rights are being [13] transferred along with the patent.

[14] Now, my starting point, which is [15] the basis for this 25-percent rule are license [16] agreements, where often other things besides [17] just a naked nonexclusive right is transferred. [18] It includes technical know-how.

[19] It includes sometimes copyrights, [20] and trademarks, and trade secrets. So it's [21] other value that's being transferred along with [22] the actual patent license.

[23] So, therefore, using that as a [24] starting point, and understanding what happens

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[1] here in this hypothetical, this factor would [2] lower my royalty rate from the starting point.

[3] THE COURT: We're going to recess [4] here for our morning recess for 15 minutes.

[5] MS. GABLER: Sure.

[6] Jury leaving the courtroom at [7] 11:31 a.m.)

[8] THE COURT: All right. We'll be [9] in recess for 15 minutes.

[10] (Whereupon a brief recess was [11] taken.)

[12] THE COURT: All right. We'll have [13] the jury brought in.

[14] Jury entering the courtroom at [15] 11:48 a.m.)

[16] THE COURT: All right. Be seated, [17] please.

[18] Ms. Gabler.

[19] BY MS. GABLER:

[20] Q: Mr. Wagner, just before the break, [21] we were concluding our discussion of factor [22] number three. And if you could just indicate to [23] the jury what effect, if any, your analysis of [24] this factor had on your starting rate of 0.9

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[1] percent?

[2] A: It would lower it.

[3] Q: And when you spoke in your [4] analysis about factor three about things like [5] know how and nonpatented items in the technology [6] that are sometimes transferred with those [7] groups, can you go over that testimony again?

[8] A: Yes. Frequently in real world [9] license negotiations when you license someone [10] else's technology, then you want to be able to [11] use it successfully, so they help you do it. [12] They often will give you engineering time, they [13] will give you documents, they will even give you [14] schematics and things to help you use the [15] technology so it will be a win/win, that you [16] will be successful,

establish a large royalty [17] base and then pay them compensation for that.

[18] Q: And the inclusion of those [19] additional items, those are included in that 25 [20] percent rule assumption?

[21] A: That is correct. That is normally [22] what happens in technology transfer agreements, [23] so it's subsumed in that starting point.

[24] Q: Now, in this case, did you see

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[1] some examples of license agreements like that [2] among those in which CPT is a licensee?

[3] A: Yes.

[4] Q: So on your earlier slide, slide [5] 16, where we were looking at rates in the range [6] of 0.252 percent to 3 percent, some of those [7] licenses in addition to including multiple [8] patents also included technological know how and [9] engineering time and training and things like [10] that; correct?

[11] A: They did.

[12] Q: If we could move on to slide 18, [13] please.

[14] Mr. Wagner, this is your slide on [15] Georgia-Pacific factor number four. Can you [16] please explain this one to the jury?

[17] A: Yes. This focuses on the [18] licensor, in this case LPL, established policy [19] about licensing their patents. And if a patent [20] owner who has that right wants to exclude others [21] from using their invention, they can do that. [22] And in those situations normally I would raise [23] the rate here, but clearly I have seen evidence [24] that LPL was willing to license its entire LCD

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[1] patent portfolio which includes the '002 patent [2] to others, including CPT, so, therefore, it's [3] neutral because my starting point are all real [4] world actual transactions where you had to have [5] a willing licensor or there would have never [6] been a license.

[7] Q: Now, we have seen earlier that LPL [8] had made an offer to license the entire 467 LCD [9] patents for 2.5 percent; correct?

[10] A: That is correct.

[11] Q: And did anyone in the LCD industry [12] in terms of the documents that you have seen in [13] the case accept LPL's offer to license at that [14] rate?

[15] A: I have not seen anyone who [16] accepted that rate.

[17] Q: And what, if any — what was your [18] conclusion as to the impact of factor number [19] four on your starting point?

[20] A: It's neutral. It's not going to [21]



change my opinion for the starting rate.

[22] Q: Let's take a look at factor number [23] five. Can you explain this factor to the jury?

[24] A: Yes. You look at the commercial

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[1] relationship between the licensor and licensee, [2] and see what impact that might have on this [3] rate. And in this particular situation LPL and [4] CPT are competitors for some of the same [5] customers. They seem to operate in slightly [6] different spaces in the industry, they don't [7] appear to normally directly compete, but I heard [8] Mr. Volpe's testimony this morning where [9] ViewSonic and LPL are competitors.

[10] So if you're a licensor and you [11] can actually help your competitor, normally you [12] want to be paid more for that. And so I [13] think — and that's the situation here, so I [14] think the rate would go up from my starting [15] point based on those facts.

[16] Q: Can you explain the next factor, [17] factor number six, to the jury?

[18] A: Factor number six I described as [19] the effect of sales of the accused features on [20] other products. Often companies will try to [21] sell you one product and then along with that [22] product they'll sell you something else. I [23] mean, the classic example, of course, is a razor [24] and razor blade.

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[1] But very often you have what's [2] called complimentary products that might go [3] along with the product you're selling. And if [4] you're selling a patented feature that actually [5] helps generate the demand for that product and [6] then you sell other things along with it, that [7] should be in the profit pool and that should be [8] considered.

[9] The only other real major product [10] line that CPT here, the licensee, sells is [11] really the old technology, the CRT cathode ray [12] tube technology. It's really a substitute [13] product and although they might sell that same [14] product to the same customer that buys the LCD [15] screen, they're not really complimentary. So in [16] my opinion there is no complimentary sales going [17] along, so therefore, this factor is neutral.

[18] Q: Can you explain Factor Number 7 to [19] the jury?

[20] A: And Factor Number 7 looks at the [21] duration of the patent and the term of the [22] license agreement. And, first, let me tell you [23] what those two terms mean.

[24] The duration of the patent is how

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[1] long the patent's life is going to be before it [2] expires. Here the '002 patent, it will expire [3] in July of 2008, based on when it was filed [4] originally.

[5] The term of the license agreement [6] is how long as the licensing the right to use [7] this patent. In most situations, the duration [8] of the patent and the term of the patent license [9] agreement are the same. Most license agreements [10] last until the last to expire patent in the [11] patent portfolio being licensed.

[12] Here, we don't have exactly the [13] same duration and terms. Because assuming, and I [14] understand that LPL is asking for an injunction [15] in this case, that if they get that injunction, [16] then this hypothetical license ends at the date [17] of judgment.

[18] So that's going to be, I assume, [19] sometime here in 2006. So the time term of the [20] license agreement is about two years shorter [21] than the duration of the patent.

[22] So that might tend to lower the [23] rate. But I think clearly the term of this [24] license agreement since 1999 through today is

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[1] long enough not for me to lower the rate.

[2] So, again, my opinion here is this [3] factor is neutral from my starting point.

[4] Q: Can you explain the next factor to [5] the jury, please?

[6] A: The next factor is really a fairly [7] important factor and it's the established [8] profitability of the products that incorporate [9] the invention. And why it's important is what [10] you've got to understand is if the licensee is [11] going to pay as a cost to the license or to use [12] their patents in selling their products, if they [13] have more profits, there's a bigger pool of [14] money to pay that, and still it lets the [15] licensee make some money.

[16] If they're not making much money, [17] then they can't afford to pay much on the [18] royalty base, or they will be losing money or go [19] out of business. So you have to look at: What [20] is the profitability of the products that are [21] incorporated in the alleged features from the [22] Claim 1 and Claim 8 of the '002 patent.

[23] And in case, based on my analysis [24] over the term of the license agreement, CPT is

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[1] only making about a three-percent profit rate on [2] its sales at the operating profit level. So [3] that is actually lower than its alleged cost [4] improvement as a

percentage of sales, so which [5] is 3.6 percent.

[6] So because of that, I think that [7] you have to consider that fact in arriving at [8] the reasonable royalty rate.

[9] Q: Can you describe for the jury how [10] you calculated the 3.6-percent cost improvement [11] rate?

[12] A: Yes. Remember I said that the [13] cost improvement that I think is a starting [14] point, the unsubstantiated increase is four [15] percent.

[16] That's the range between the three [17] and five percent that Mr. Cobb had in his [18] original report. And remember, though, it's [19] only a percentage of cost, not a percentage of [20] sales.

[21] And so I had to translate that [22] into the — what is the percent of sales? And [23] if you remember, I told you that the cost of [24] sales is 89 percent of the sales, which is about

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[1] 90 percent.

[2] So you really take the four [3] percent of the 90 percent and that works out to [4] be 3.6 percent. So if I'm going to express it [5] as a percentage of sales, the cost savings is [6] 3.6 percent.

[7] Q: And what, if anything, is the [8] impact of Factor 8 on your starting point of 0.9 [9] percent?

[10] A: Well, it was assuming that there's [11] lot of profits available to pay this royalty [12] rate. And I find that there really isn't.

[13] This is, again — and this [14] information is consistent with the competitive [15] industry that profit margins are thin. And so [16] you have to be careful with your costs.

[17] And as a result, I think this [18] would lower the rate from my starting point.

[19] Q: Can you explain the next factor, [20] Factor 9 to the jury?

[21] A: Factor 9 is called the utility and [22] advantage of the technology over the old modes. [23] It's really, What did this invention bring to [24] the table? What really was the advancement in

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[1] the state of the art or the science that the [2] claims of this patent brought to bear, and the [3] benefits that are going to be achieved by using [4] these particular inventions?

[5] And I understand, and I read the [6] patent itself, and it claims to improve yield, [7] which I understand, also, and I agree would [8] directly reduce manufacturing costs. So that's [9] what is the utility advantage of this patent.

[10] But based on the facts of this [11] case, I have not seen an actual study of what



claims of the '002 patent are invalid by anticipation?

[19] And then I have included in Claim [20] 1 and Claim 8 for an individual yes or no [21] response.

[22] Then question 9 of plaintiff's [23] proposal becomes question 11 and I do the same [24] thing about the obviousness issue, having a

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[1] space for Claim 1 and Claim 8.

[2] And then I go to the page ten, and [3] say to the jury, "If you found infringement of a [4] valid claim, please answer question 12." That's [5] the next question. "If you have not found [6] infringement or you have found infringement only [7] of a claim you have found to be invalid, do not [8] answer question 12." I struck the next [9] sentence.

[10] And then question 12 says, "What [11] sum of money would fairly and adequately [12] compensate the plaintiff for infringement?" And [13] then there is a place for the answer.

[14] So in essence I got to question [15] five on defendants' proposal and then shifted [16] over to the plaintiff.

[17] MR. BONO: Your Honor, on the [18] anticipation and obviousness.

[19] THE COURT: Yes.

[20] MR. BONO: It's been as the [21] testimony was presented, Dr. Howard did not [22] offer any anticipation opinion on Claim 8, and [23] he did not offer an obvious opinion on Claim 1. [24] His anticipation opinion was limited to Claim 1

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[1] and his obviousness opinion was limited to Claim [2] 8, and that's why we had only included Claim 1 [3] on anticipation and Claim 8 on obviousness.

[4] THE COURT: Yes. Can I hear from [5] defendants?

[6] MS. CORBIN: Your Honor, we will [7] agree to anticipation on Claim 1 and obviousness [8] on Claim 8.

[9] THE COURT: All right. So we'll [10] edit it to reflect the agreement between the [11] parties.

[12] MR. BONO: Thank you, Your Honor.

[13] THE COURT: Is there anything [14] further?

[15] MS. GABLER: Your Honor, can I ask [16] for a little clarification on how you're [17] presenting on the last page the damages number. [18] I believe it's undisputed at this point that [19] plaintiffs aren't seeking an award against [20] ViewSonic, Tatung or Tatung USA, they're only [21] seeking against CPT.

[22] THE COURT: Yes.

[23] MS. GABLER: And I want to make [24] sure the award form is going to be worded as

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[1] such. Is there any disagreement with that?

[2] THE COURT: That is the [3] understanding. It doesn't say against [4] defendants because I thought everybody [5] understood it was CPT. It says, "What sum of [6] money would fairly and adequately compensate [7] plaintiff for infringement?"

[8] MS. GABLER: We would like it to [9] indicate since they're only seeking it against [10] CPT so that there can't after the fact — we [11] have already seen some press in the courtroom [12] and if it was worded generically, it would be an [13] opportunity, even though they haven't been [14] seeking damages against the other three [15] defendants, for a press release to be indicating [16] that that award was made against those three [17] defendants also, and that doesn't accurately [18] reflect the positions taken in the case.

[19] And that would be a situation — [20] we just want to make sure that the judgment is [21] clear that the judgment can only be entered [22] against CPT since they have expressly disavowed [23] seeking a judgment or damages benefits against [24] the other three.

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[1] THE COURT: I thought that's why [2] this was worded to just on the — basically to [3] the plaintiff's side, but it's clear in the [4] record that only CPT is exposed to damages here. [5] The judgment order, if there is one that I enter [6] will only say CPT because that's what everybody [7] agrees to.

[8] Do you disagree with that, [9] Mr. Bono?

[10] MR. BONO: No, Your Honor, I think [11] the way to handle it is in the judgment order.

[12] MS. GABLER: That's fine.

[13] MR. YOVITS: Your Honor, we [14] recognize that in light of your ruling on the [15] jury instructions there won't be questions on [16] the verdict form regarding indefiniteness, [17] enablement or written description, but [18] defendants still feel that such questions would [19] be appropriate.

[20] THE COURT: All right. Your [21] exception is noted.

[22] Anything else? Of course, you [23] know, like I said, I just want to make it clear [24] on the record that anything you have asked for

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[1] either in paper or during the course of

the [2] trial would be an exception to what I have [3] ruled.

[4] MR. YOVITS: Thank you, Your [5] Honor.

[6] THE COURT: All right. Then we'll [7] take a five-minute recess and you'll need to [8] give that information to my law clerk about the [9] reference so we have it correct.

[10] MR. RHODES: Your Honor, how do [11] you want to handle objections to exhibits?

[12] THE COURT: I'll do them right now [13] for you.

[14] MR. RHODES: Okay.

[15] MR. SWEENEY: Good afternoon, Your [16] Honor. Jerry Sweeney.

[17] Your Honor, I think we can [18] accelerate the process pretty quickly here. [19] There were three days on which plaintiffs [20] offered into evidence a collection of exhibits [21] and what I would like to do is just address [22] those to which we object very quickly.

[23] On July 17th, Plaintiff's Exhibit [24] Number 12 was submitted. What that is is a

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[1] compilation of thirteen prior exhibits [2] identified on the initial exhibit list, so that [3] one exhibit is a combination of what was [4] previously identified in the original exhibit [5] list as 312, 315, 316, 317, 318, 319, 321, 322, [6] 324, 327, 337, 339, and then two collections of [7] mask files which were previously identified as [8] 340.

[9] So with respect to our objection, [10] it is again a cumulative collection, stuffing [11] objection.

[12] Also on 7/18, Exhibit 13 was [13] submitted. That is a compilation of twenty-nine [14] prior exhibits identified on the initial exhibit [15] list. Those were previously identified prior to [16] their submission on the 13th as 313, 320, 323, [17] 325, 326, 328, two sections of — three sections [18] of 328, two sections from what was previously [19] 329, 330, there were three sections of what [20] previously came out of 331, there is two [21] sections out of 332, 333, 334, 335, 337, 338, [22] 341, 342, 343, 344, 345, 346, two sections of [23] what previously had been 347, 348, 349, 350, [24] 351, 352, 353, and 354, again, the same

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[1] objection.

[2] With respect to Plaintiff's [3] Exhibit Number 8 which was a mask file, no [4] questions were asked during the course of the [5] testimony. We object on a foundation basis.

[6] Plaintiff's Exhibit 28, two [7] photographs, again, no questions were asked